KLE TECH. KLE Technological University
Creating Value Leveraging Knowledge

Centre for Engineering Education Research

Faculty Induction Training for faculty members of BVBCET

September 04, 2019
in Engineering Exploration Studio (LHC 201)

AGENDA OF THE WORKSHOP

TIME	TOPICS	DETAILS	RESOURCE
September 04, 2019			
9.00 am	Registration		
9.30 am	Introduction to OBE and Elements of OBE	Need for OBE, PEOs, POs, OEs, Articulation Matrix, CLOs – Basic definitions, examples, their relationship	Prof. Prakash Tewari
11.00 am	Tea		
11.15 am	Course Design and delivery	CLOs – What, Why and How to write? Course Articulation Matrix TLOs, Bloom's Taxonomy, TLOs and CLOs relationship	Prof. Gopalkrishna Joshi
12.45 pm	Lunch		
1.30 pm	Outcomes Assessment	Introduction – Outcomes, Elements, PIs: Meanings and their assessment strategies	Prof. Gopalkrishna Joshi
3.00 pm	Tea		
3.15 pm	Effective Teaching	Effective Teaching Techniques and practices	Prof. Prakash Tewari

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Faculty Induction Program (FIP)

1. Objectives of the Practice

Faculty Induction training focuses mainly on enabling newly recruited faculty members in different teaching pedagogies, making them understand how to design curriculum and about OBE (Outcome Based Education).

2. **The Context**

Centre for Engineering Education Research (CEER) organizes Faculty Induction training for newly recruited faculty members KLE Technological University. On 04th, September 2019 CEER successfully conducted induction training for newly recruited faculty members of the institute. Faculty members actively participated in the deliberations during the training. The event serves as a platform for learning new ideas and practices followed across the various schools and departments of the university.

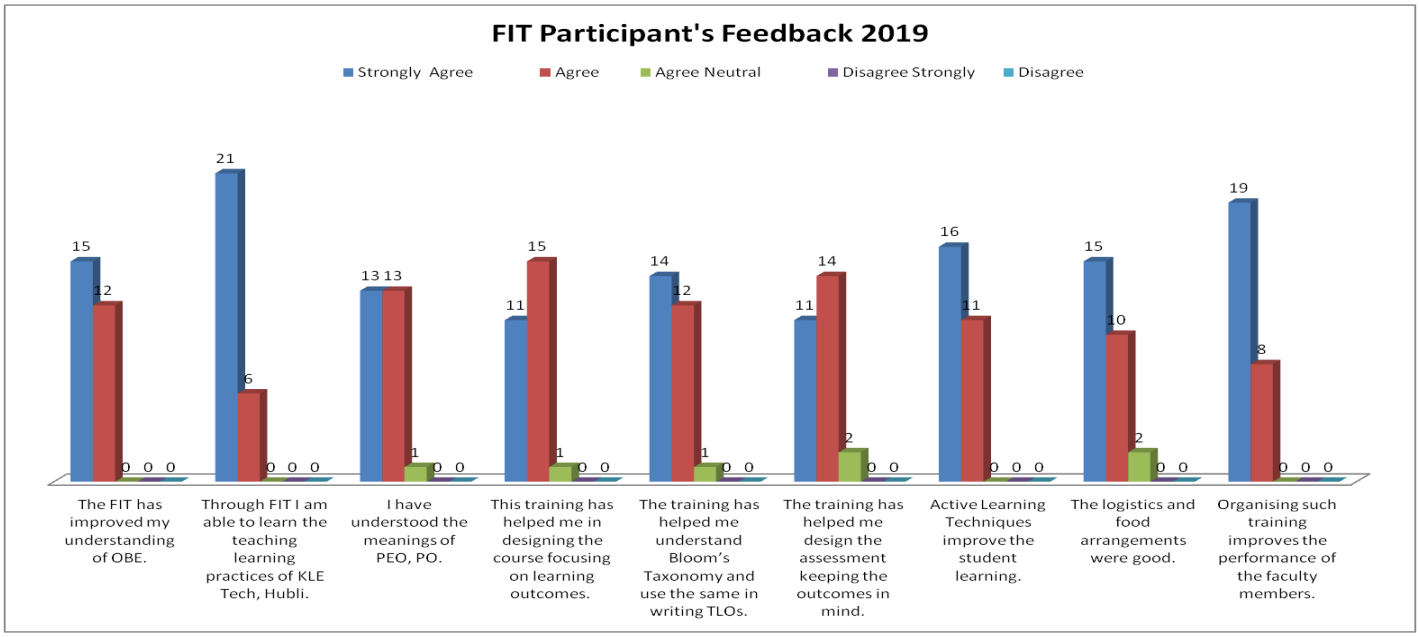
5. **Evidence of Success**

The training was conducted in four distinct sessions; total 31 faculty members participated in the training and gave feed back as well.

Table 1Schedule of Faculty Induction Training

Sl.No.	Session name	Content covered	Resource Person
1	Introduction to OBE and Elements of OBE	Need for OBE, PEOs, POs, OEs, Articulation Matrix, CLOs – Basic definitions, examples, their relationship	Dr. P G Tewari
2	Course Design and delivery	CLOs – What, Why and How to write? Course Articulation Matrix TLOs, Bloom's Taxonomy, TLOs and CLOs relationship	Dr, Gopalkrishna Joshi
3	Outcomes Assessment	Introduction – Outcomes, Elements, PIs: Meanings and their assessment strategies	
4	Effective Teaching	Effective Teaching Techniques and practices	Dr. P G Tewari

Table 2 Faculty Feedback Analysis



FACULTY INDICTION TRAINING 2019

DATE: SEPTEMBER 04,2019 VENUE: LHC 201

LIST OF PARTICIPANTS:

Sr. No	Name of the faculty member	Department	Signature (Morning Session)	Signature (Afternoon Session)
1	Mr. Gurubasu M Hombal	Electrical Engg		
2	Ms. Aditi Kadam	Electrical Engg		
3	Mrs. Shachi P	Electrical Engg		
4	Mr. Altaf Husain	Electrical Engg		
5	Ms. Padmaja B Kallimani	Electrical Engg		
6	Ms. Deeksha Nandur	Electrical Engg		
7	Ms. Jayashree Mallidu	Electrical Engg		
8	Ms. Mouna Naravani	Electrical Engg		
9	Dr.Nirmala S R	Electronics & Com		
10	Prof.Dolla P Dola P	Electronics & Com		
11	Prof Anupama	Electronics & Com		
12	Prof.Sheela B	Electronics & Com		
13	Prof.Prathiba	Electronics & Com		
14	Prof.Priti Jigalur	Electronics & Com		
15	Prof.Shradha Revankar	Electronics & Com		
16	Prof.Supriya K	Electronics & Com		
17	Prof.Shashidar N	Electronics & Com		
18	Prof.Anjana R	Electronics & Com		
19	Vinayak Naikar	Civil		3:15 PM
20	Anoop Shirkol	Civil		
21	Bapugouda Biradar	Civil		
22	Tuisa A.Badagi	CSE		
23	Vani yelamani	Humanities		
24	Saurabh N	School of Architecture		
25	Pratima Bengeri	School of Architecture		
26	Hima C S	School of Architecture		
27	Harish B P	School of Architecture		
28	Poornima Byahati	A&R		
29	Sahana M B	A& R		
30	Channamma. Kolamar	A&R	11.15 am	

Civil –
CSE –
EC –
E&E –
Archi –

DIRECTOR
Centre for Engineering Education Research
K.L.E. Technological University, Hubballi-31.

KLE Technological University
Creating Value
Leveraging Knowledge

Centre for Engineering Education Research
KLE Technological University
B. V. Bhoomaraddi Campus, Vidyanagar, Hubballi (India)

Faculty Development Program on"KLE Tech Model for Blended Learning"

Date	July 9-11, July 13-15 and July 16-18, 2020
About the workshop	The Centre for Engineering Education Research is conducting a three-daysonline program for the faculty of KLE Tech, to disseminate the principles and practise of creating a Blended Learning environment. The training focuses on the following:- 1. What is Blended Learning? 2. KLE Tech Blended Learning Model 3. How to create content for online Learning? 4. Operational aspects of creating a blended learning environment
Coordinator	Dr. Gopalkrishna Joshi, Director, Center for Engineering Education Research, KLE Tech, Hubballi Email id: ceer@kletech.ac.in
Who can apply ?	The workshop will be conducted in three batches as per the dates mentioned above. Heads of department are requested to nominate faculty by contacting the coordinator.
Resource Persons	Dr.Gopalkrishna Joshi Ms. Preethi Baligar Mr. Sanjeev Kavale Mr. Kaushik M
Procedure for registration	For further details on participating in this program, please contact the coordinator.
Venue	Via Microsoft Teams

CENTRE FOR ENGINEERING EDUCATION RESEARCH

Centre for Engineering Education Research

Feedback Report for batch 01

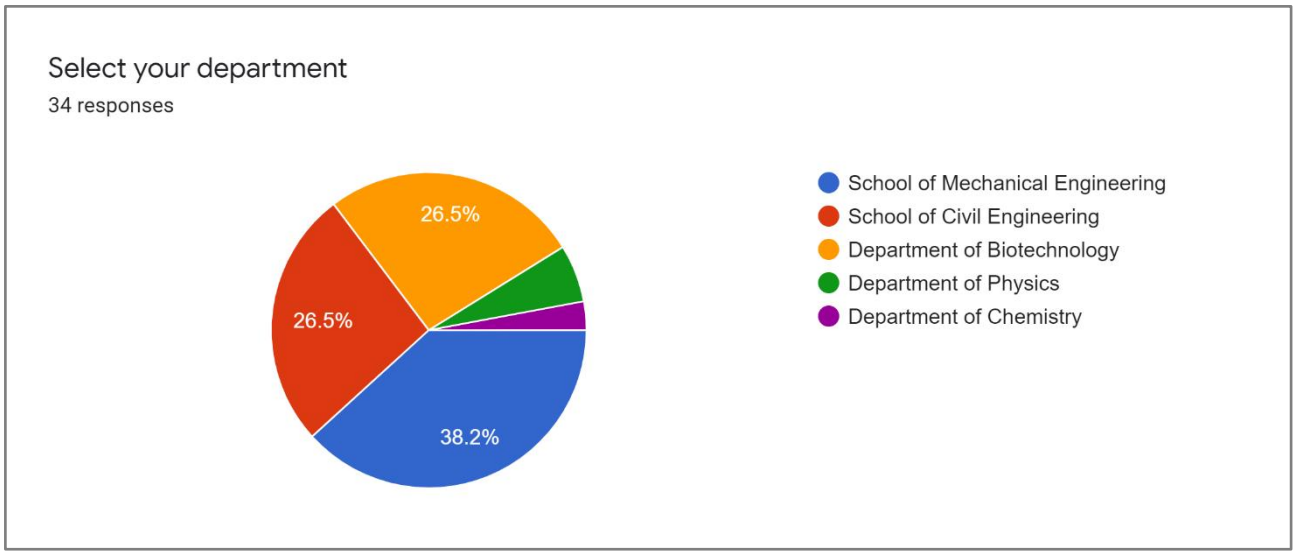
Workshop on KLE Tech Model for Blended Learning

July 9-11, 2020

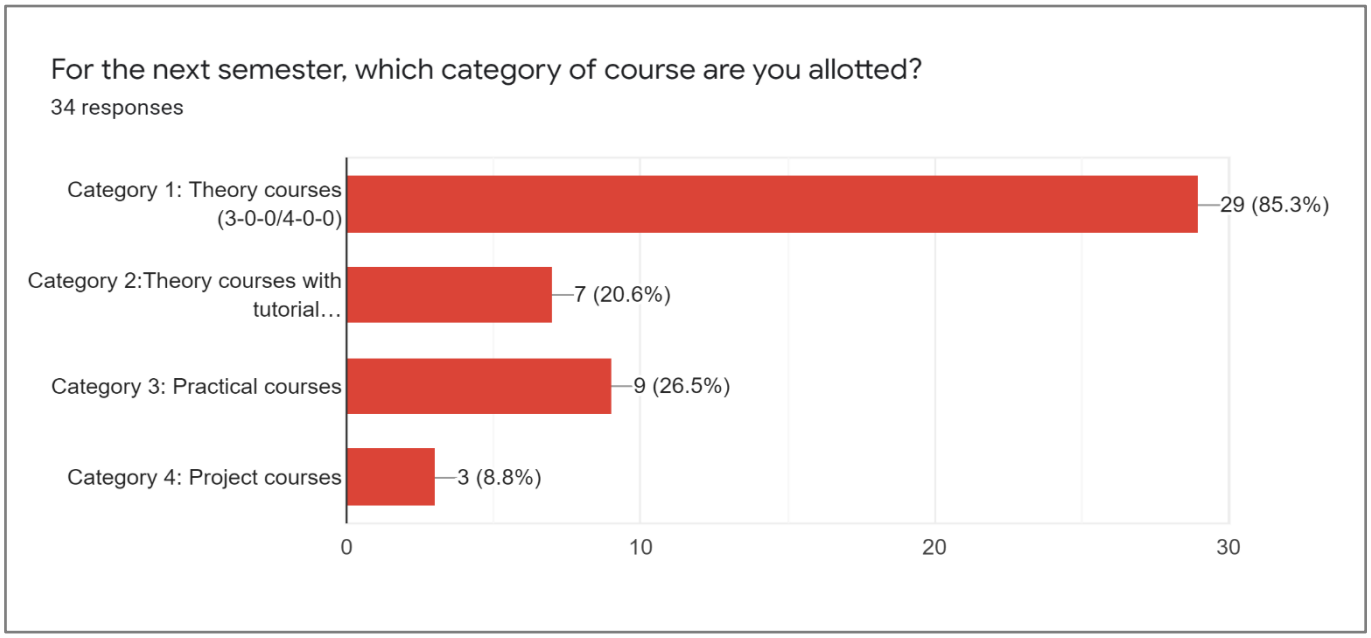
Description of the document: This document reports the feedback for the workshop on KLE Tech model for Blended Learning.

Participants: 50faculty members from five departments/schools (SME, CIV, BT, PHY and CHEM) attended the workshop and 33 members responded to the feedback form.

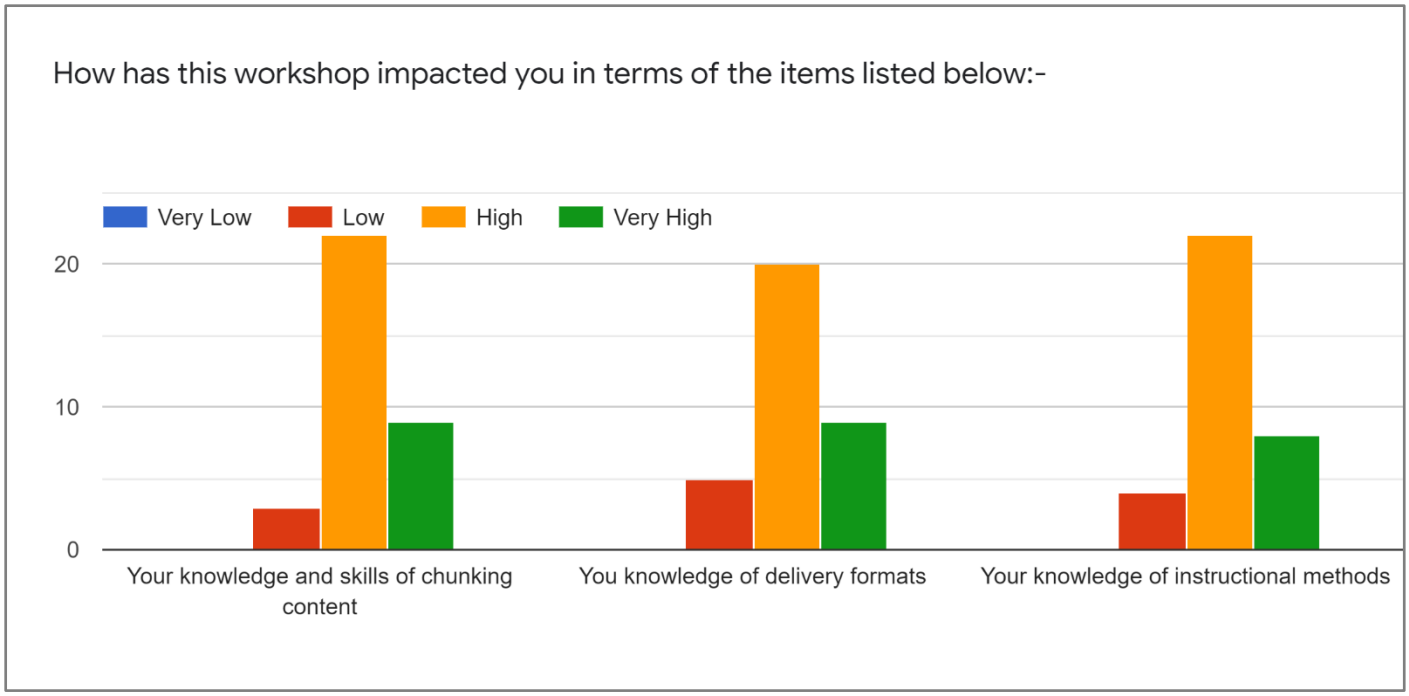
1. Distribution of departments



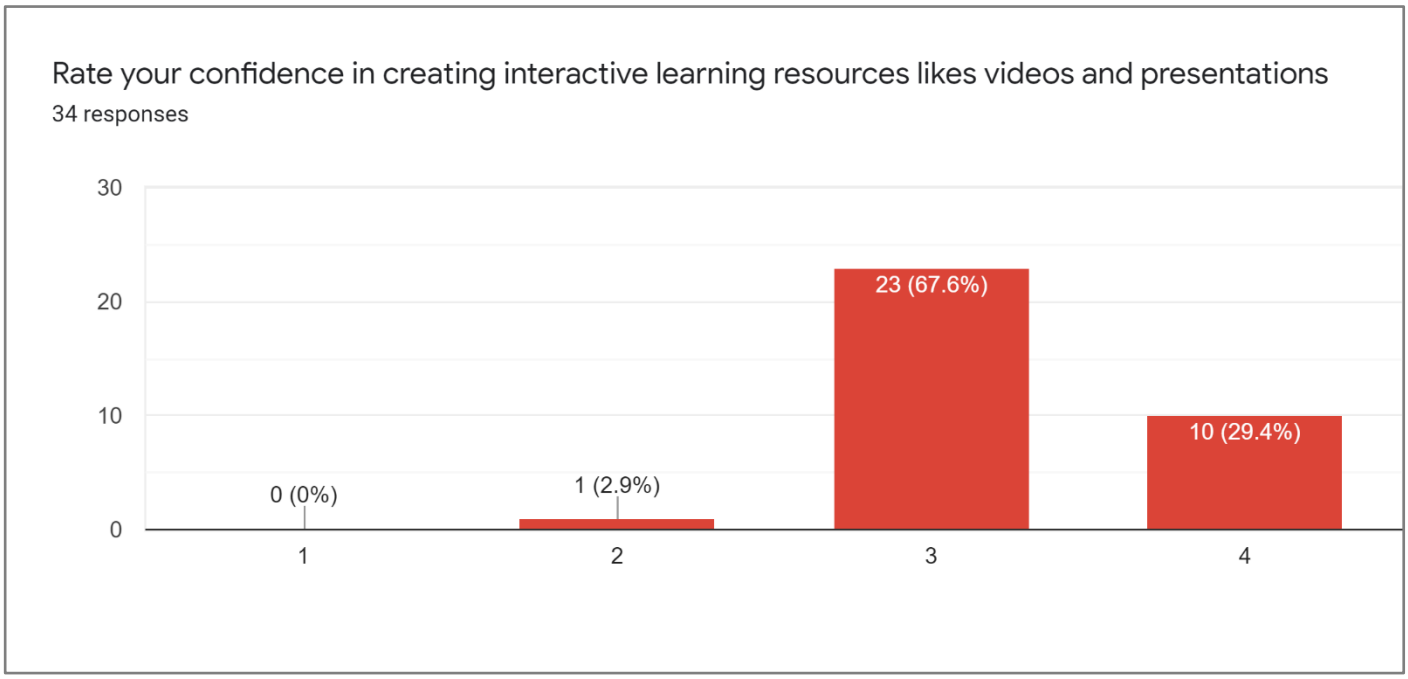
2. Category of courses



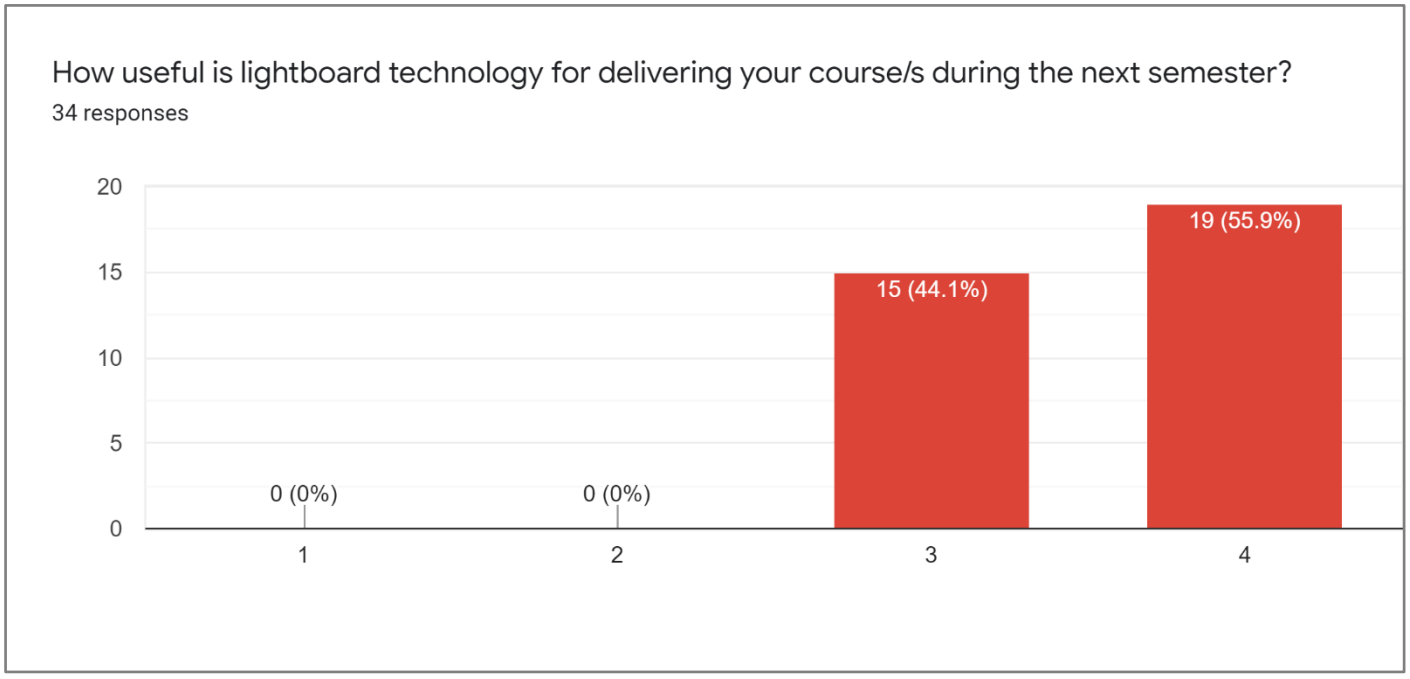
3. Impact of workshop on knowledge and skills



4. Perceived Confidence in creating interactive learning resources



5. Usefulness of lightboard technology in delivering your course



6. List the challenges you foresee in developing your course for blended learning.

The challenges posed by the participants are categorised into three broad themes

1. Technology related
2. Production related
3. Pedagogy/Course related

Technology related	Production related	Pedagogy/course related
1. Creating animations 2. Creating videos 3. Learning Lightboard usage 4. Learning LMS usage	1. Creating Script 2. First time experience of teaching on camera 3. English language, body language 4. Time management for production activities so that we undergo minimum retakes	1. How to create interaction opportunities between students 2. Lack of familiarity with blended learning 3. For courses that we haven't taught before, estimating size of chunk and duration of delivery 4. Developing content for numerical-based courses 5. Creating questions for post test 6. Chunking for content types: conceptual and principles 7. Developing content for category courses in Category 2:Theory courses with tutorial or practical component 8. Need clarity for practical courses 9. Finite element method and CAED Lab delivery

Feedback Report for batch 02

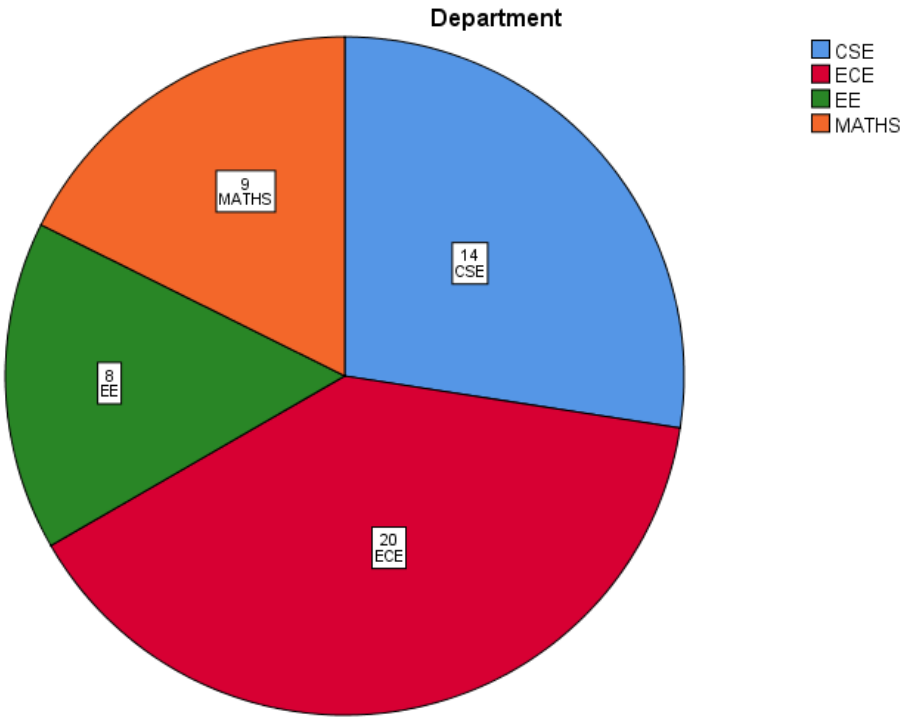
Workshop on KLE Tech Model for Blended Learning

July 13-15, 2020

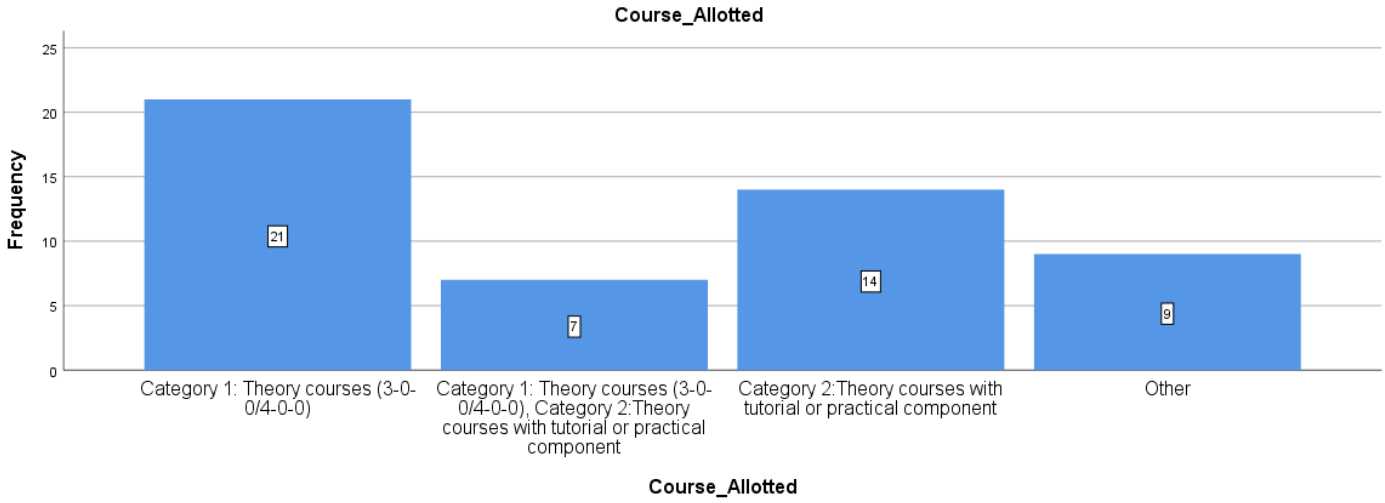
Description of the document: This document reports the feedback for the workshop on KLE Tech model for Blended Learning.

Participants: 90-100 faculty members from four departments/schools (CSE, ECE, EE, MATHS) attended the workshop and 51 members responded to the feedback form.

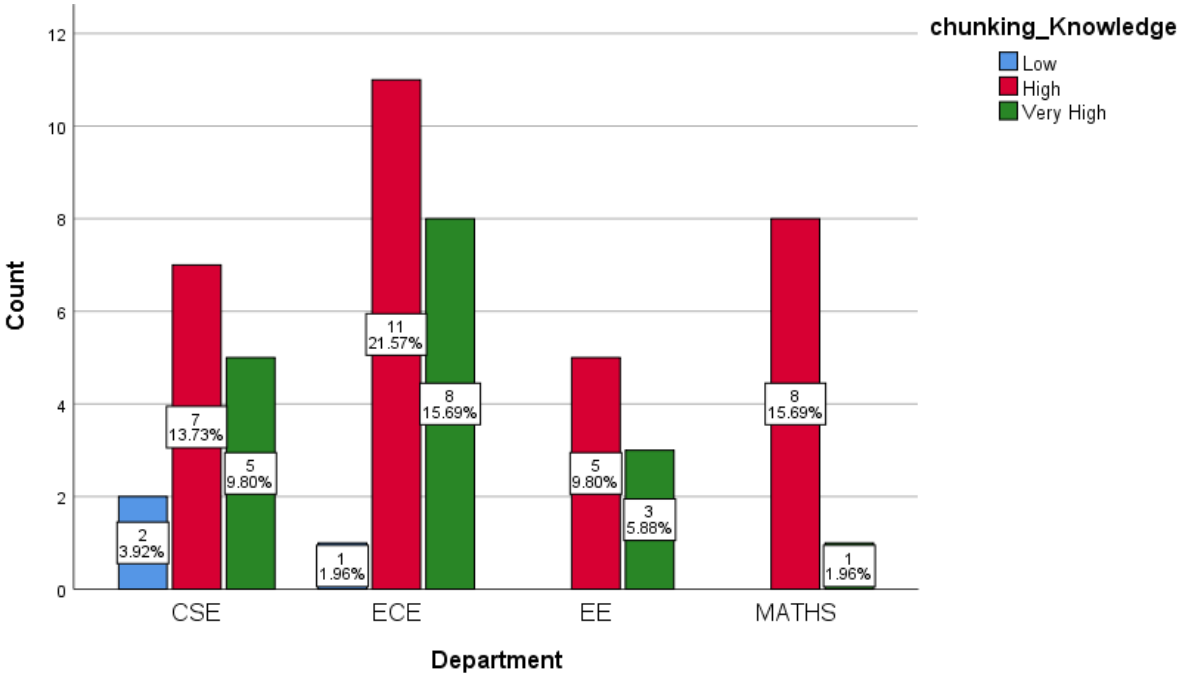
1. Distribution of departments



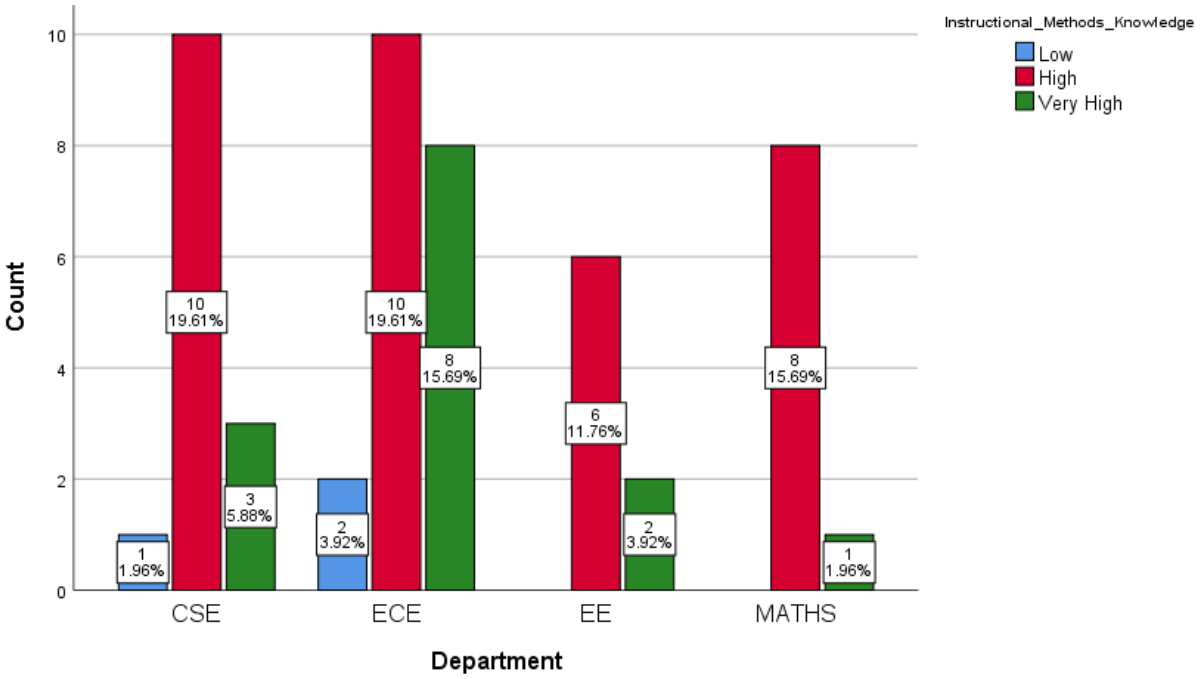
2. Category of courses alloted for next semester



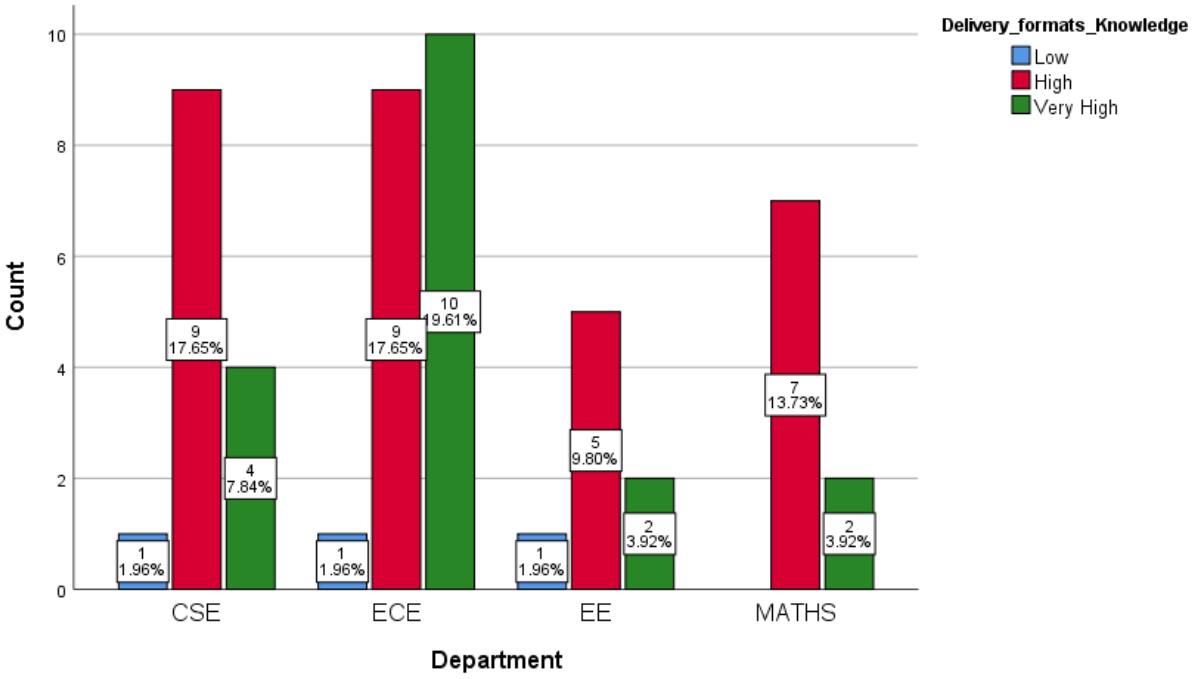
3. Impact of workshop on knowledge and skills of chunking content



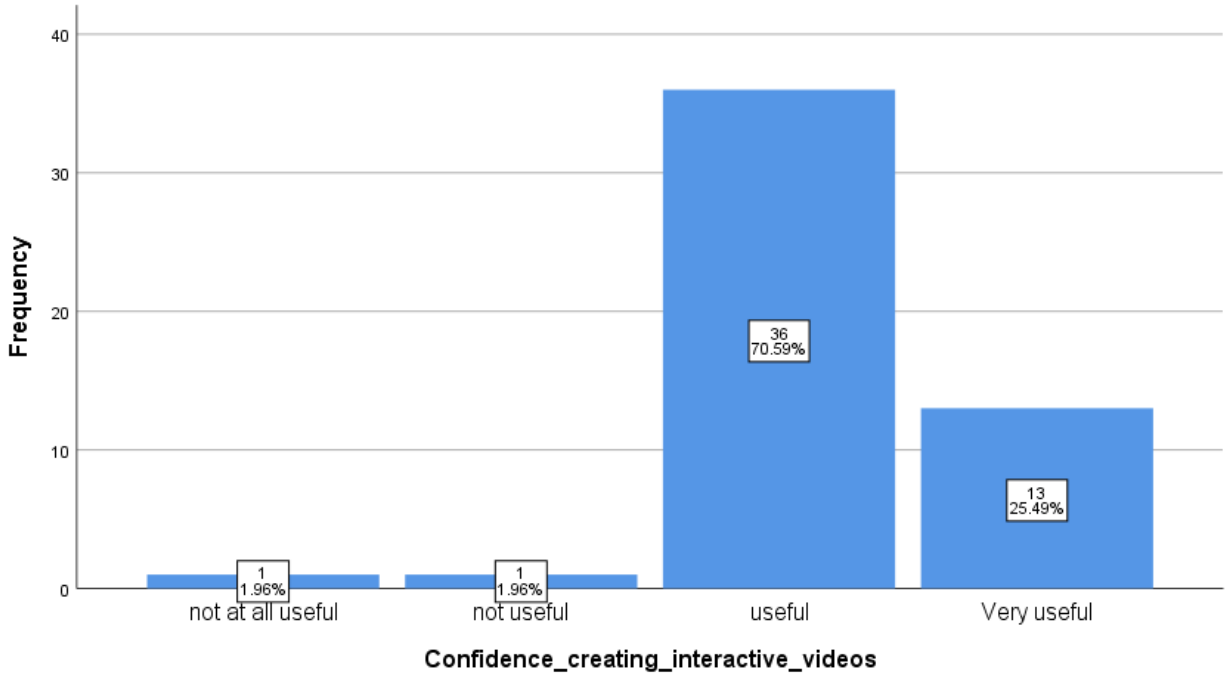
4. Impact of workshop on knowledge of instructional methods



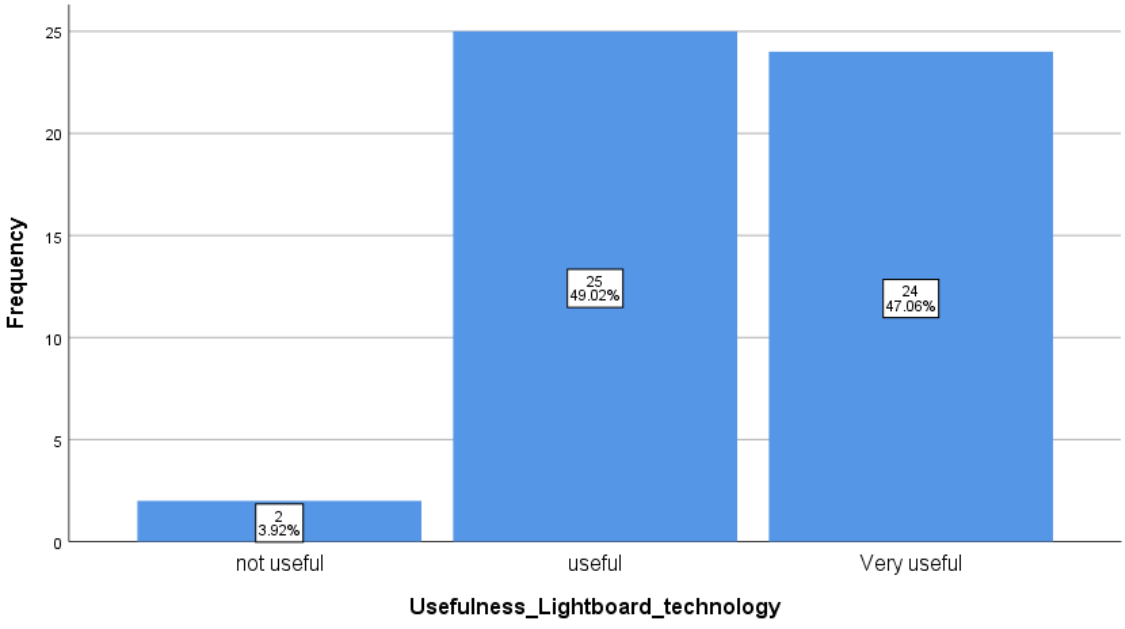
5. Impact of workshop on knowledge of delivery formats



6. **Rate your confidence in creating interactive learning resources likes videos and presentations**



7. **How useful is lightboard technology for delivering your course/s during the next semester?**



8.List the challenges you foresee in developing your course for blended learning.

The challenges posed by the participants are categorised into three broad themes

1. Technology related
2. Production related
3. Pedagogy/Course related

Technology related	Production related	Pedagogy/course related
1. Use of glass board 2. Making interactive videos	1. Planning correctly 2. Effort distribution between faculty 3. Writing script 4. Time for writing scripts 5. New experience of teaching in front of camera, 6. time management 7. video scripting , voice modulation 8. video length	1. Managing Students attention on asynchronous mode, 2. Providing on go examples may not be possible as we suppose do earlier. 3. Programming courses have lots of doubts. How to handle this? 4. concept complexity 5. chunking Numerical and derivations 6. Chunking lengthy content 7. Conveying schematic diagrams 8. Maths courses are challenging 9. Practical courses are challenging 10. Tutorial courses are challenging 11. Designing content for application is difficult

Feedback Report for batch 03

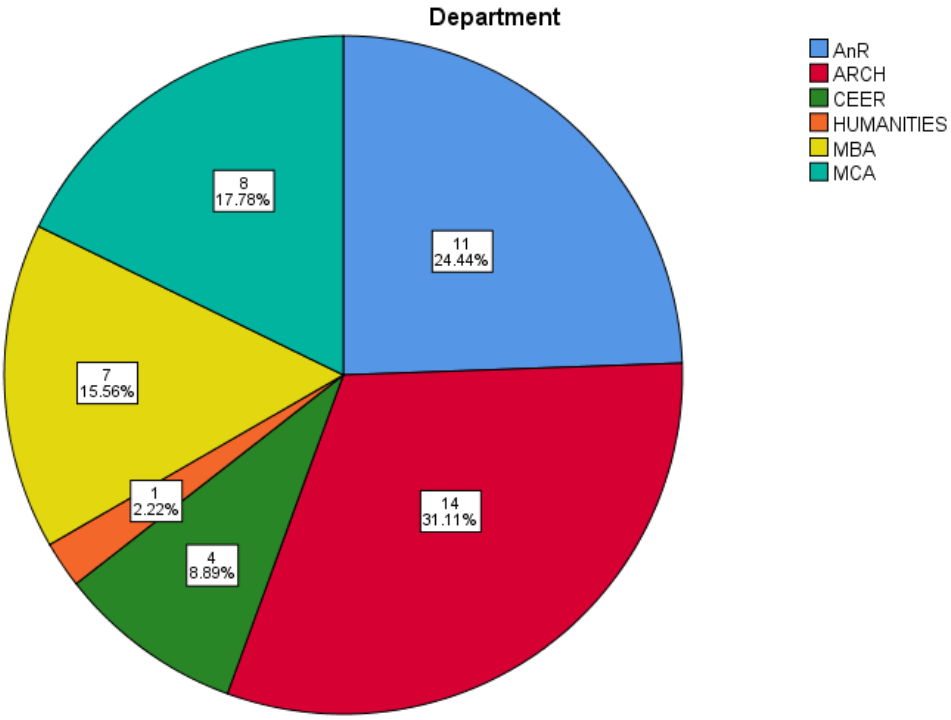
Workshop on KLE Tech Model for Blended Learning

July 16-18, 2020

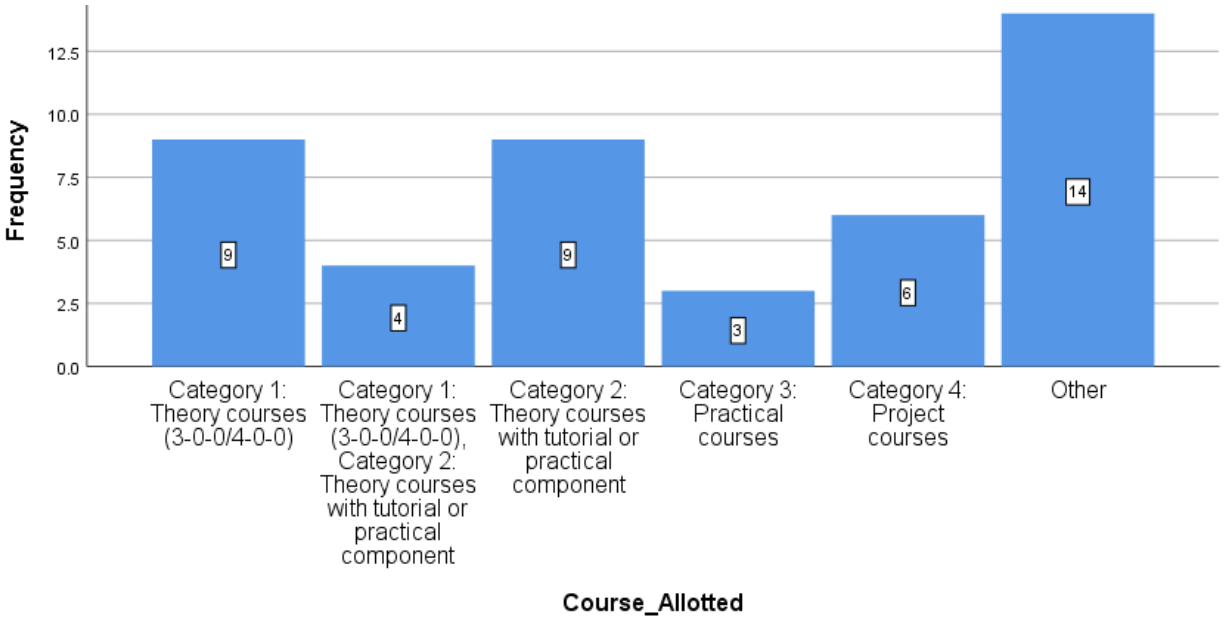
Description of the document: This document reports the feedback for the workshop on KLE Tech model for Blended Learning.

Participants: Around 50 faculty members from six departments/schools (AnR, ARCH, MBA, MCA, CEER, Humanities) attended the workshop and 45 members responded to the feedback form.

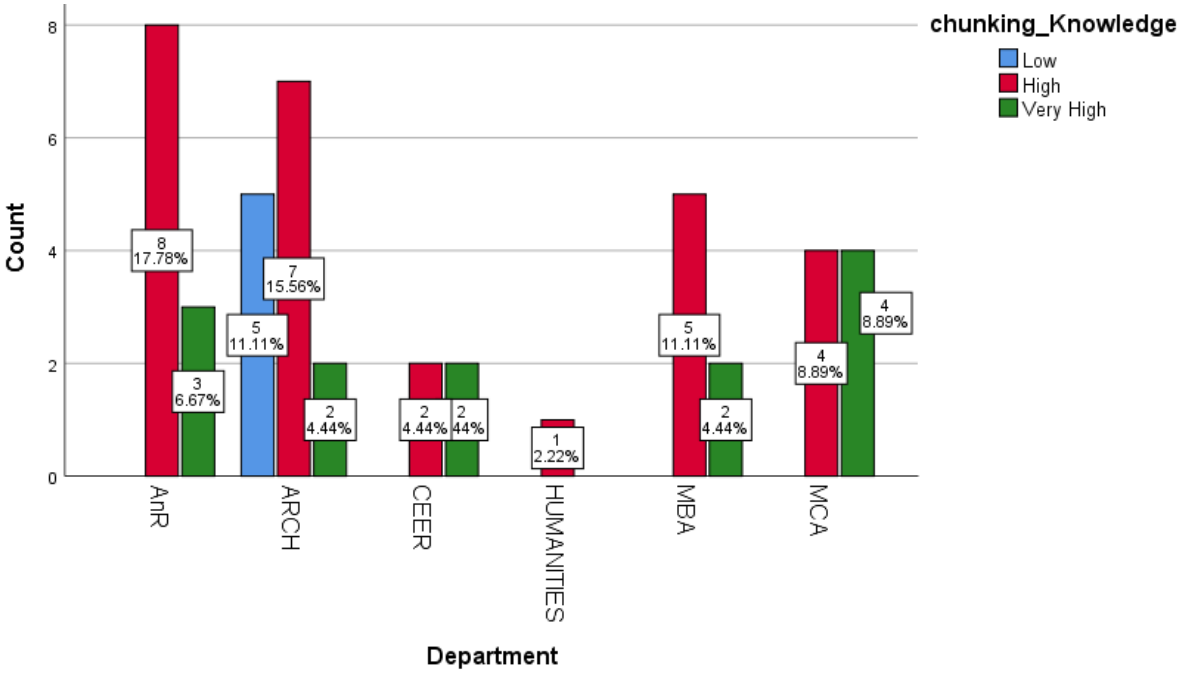
1. Distribution of departments



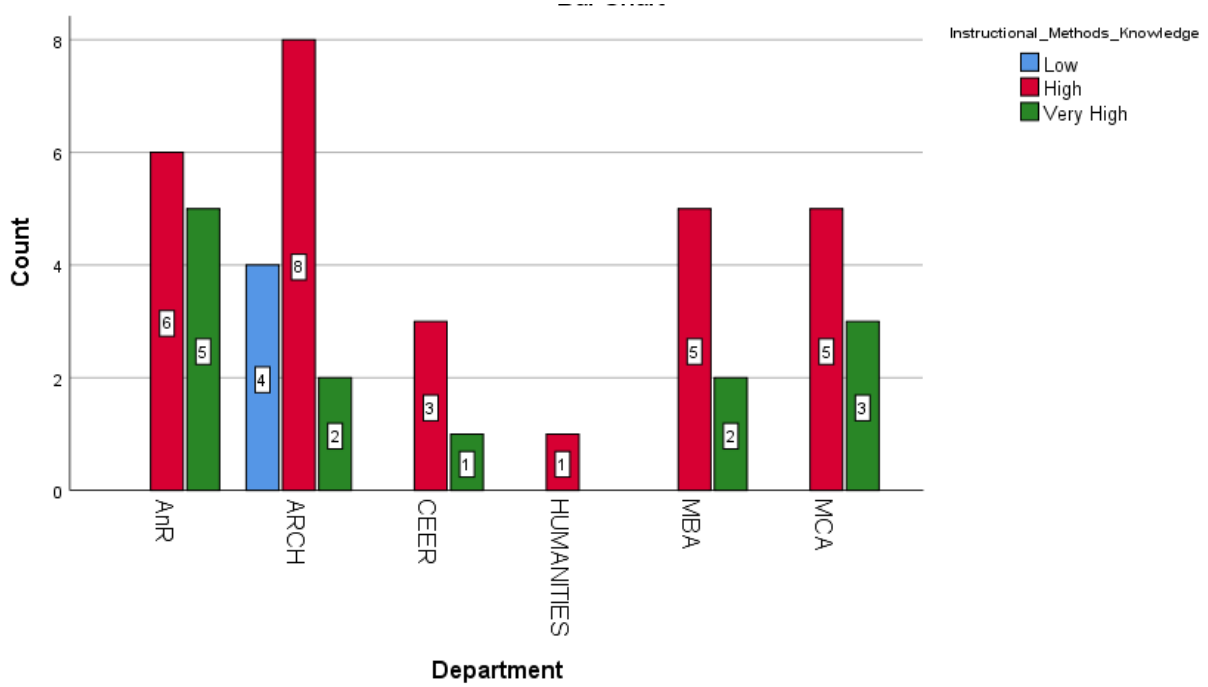
2. Category of courses alloted for next semester



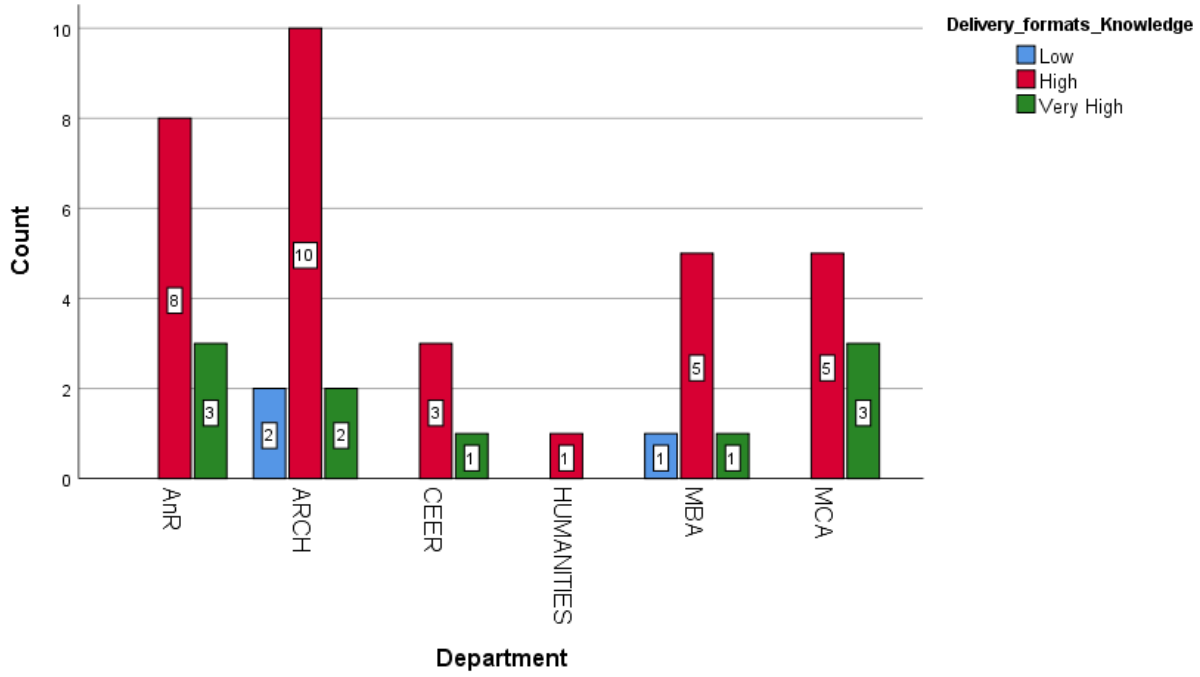
3. Impact of workshop on knowledge and skills of chunking content



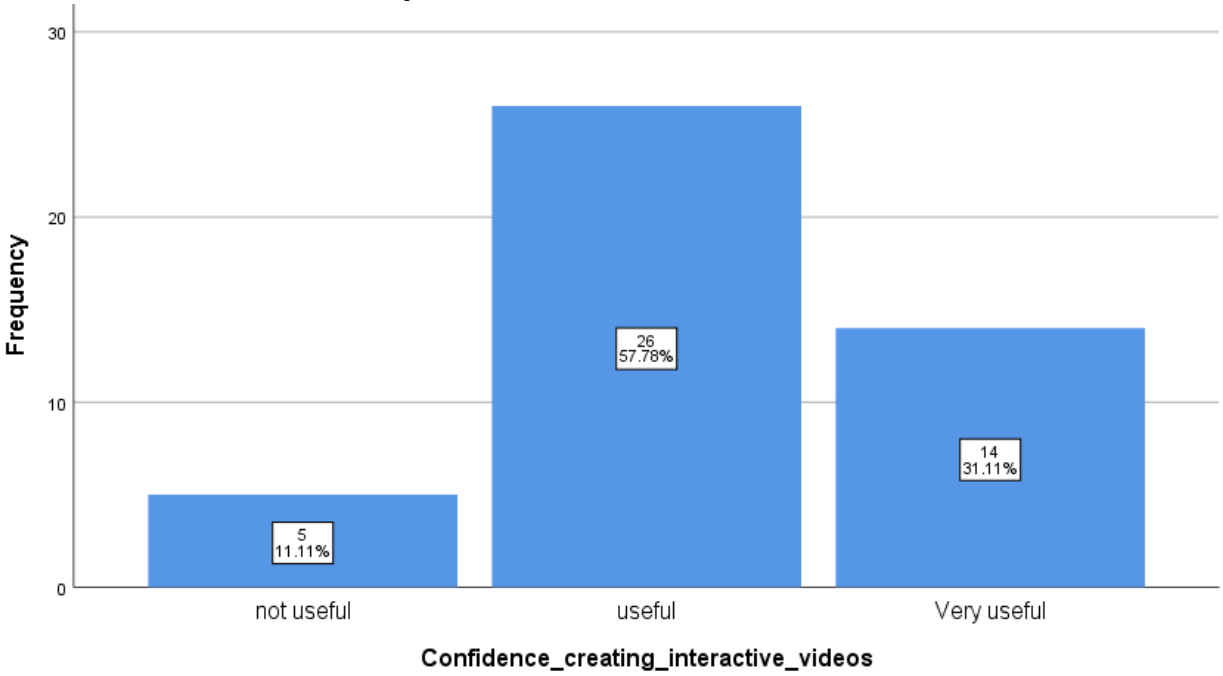
4. Impact of workshop on knowledge of instructional methods



5. Impact of workshop on knowledge of delivery formats



6. **Rate your confidence in creating interactive learning resources likes videos and presentations**



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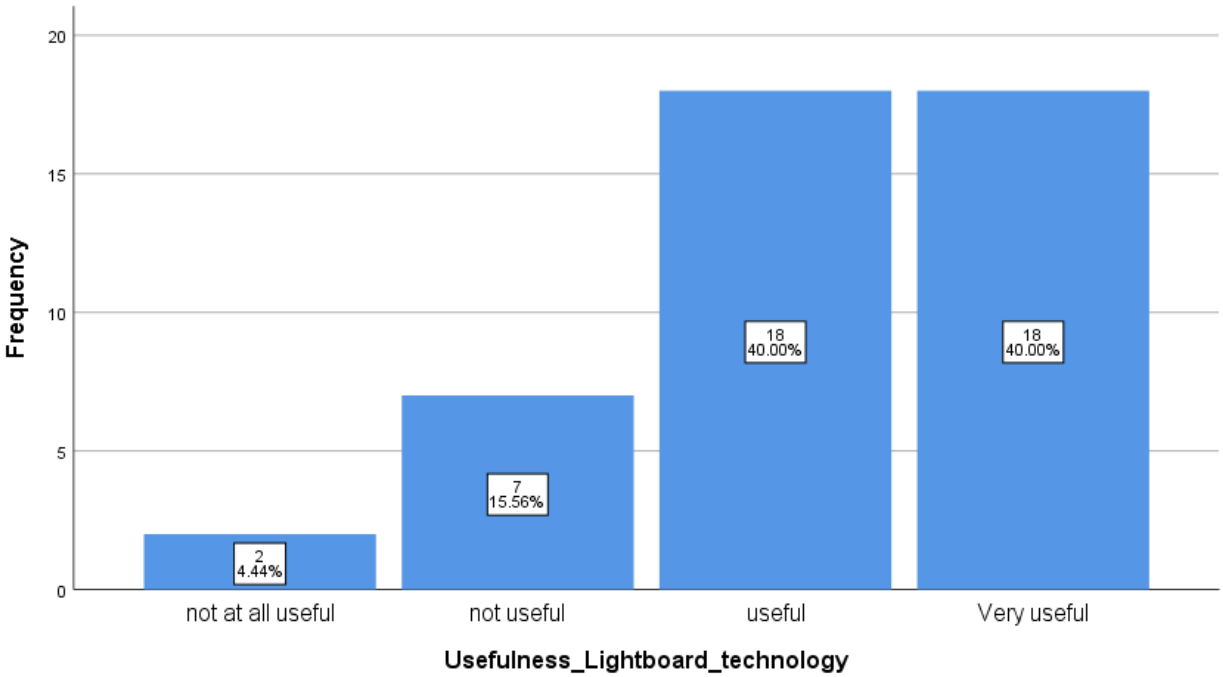

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The challenges posed by the participants are categorised into three broad themes

1. Technology related
2. Production related
3. Pedagogy/Course related

Technology related	Production related	Pedagogy/course related
1. Video recording 2. Learning new technology 3. Usage of Light board 4.	1. Allotment of Two courses need more time for creating online content 2. Content chunking 3. Less time 4. Writing script for complex content 5. Identification of knowledge chunks and appropriate resources	1. Content preparation 2. Explaining figures 3. Teaching numericals 4. Teaching a course like history 5. Teaching model making online 6. Creating activities 7. Creating interaction 8. Arhitecture courses are studio-based. Taking them online is challenging 9. Theory with practical courses/tutorials is challenging online 10. Practical simulations 11. Creative and instant thinking during the teaching and learning may not possible 12. Evaluation of programming assignment 13. Picking up appropriate examples for delivering the facts/concepts

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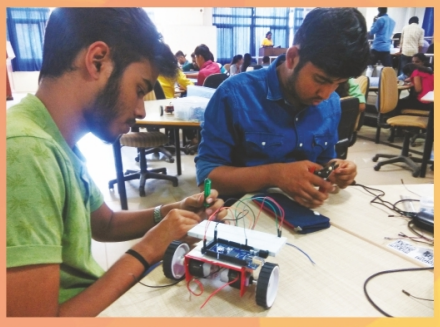
PRAYOG VASANT - 2020

EXHIBITION OF ENGINEERING EXPLORATION COURSE PROJECTS

171 PROJECTS BY 700+ FIRST YEAR B.E. STUDENTS

Date: 9th and 10th July 2020

JOIN US TO CELEBRATE STUDENTS' SUCCESS






Engineering Exploration @ KLE Tech

"Engineering Exploration" course is a unique innovation born in the educational ecosystem of KLE Tech. This first-year course is co-designed and team-taught by faculty from multiple engineering disciplines. It focuses on problem solving, engineering design, multi-disciplinary skills, ethics and sustainability. It follows PBL pedagogy and students work in teams to solve identified problems. Prayog Vasant is an exhibition conducted in last week of Fall semester and it serves as a platform for peer learning and celebration of student's success.

Contact:

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YouTube

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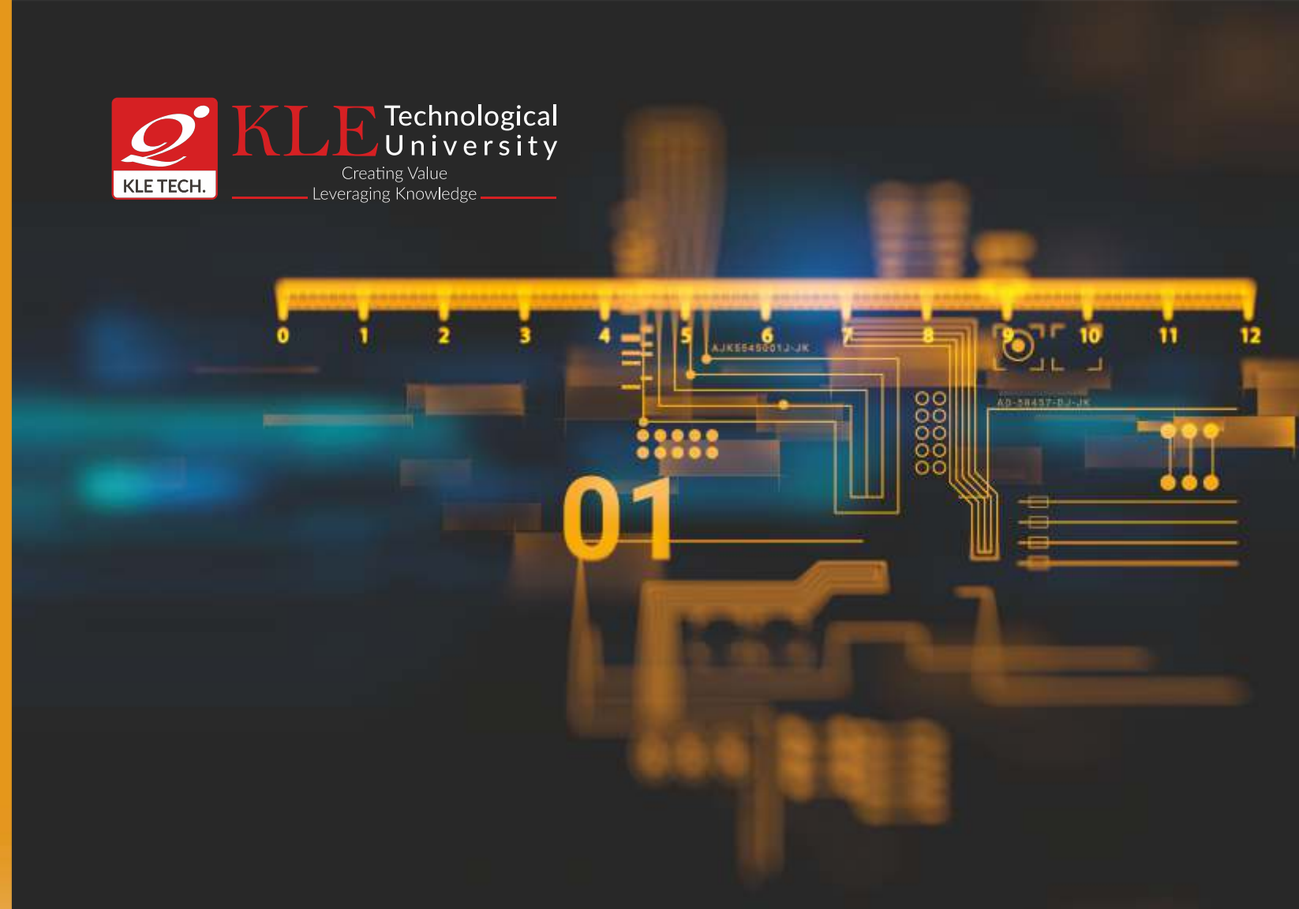
KLE Technological University, Vidyanagar, Hubballi-580031



PRAYOG VASANT

Exhibition of
Engineering Exploration Course Projects

Team Engineering Exploration


Sanjeev M Kavale


Prashant Narayankar


Rajeshwari S Mattimani


Radhika Amashi


Vinay M Talageri


Sharanappa Achappa


Jyoti Gadad


Madhu Asundi


Preethi Baligar


Padmaja B Kallimani


Raghuraja Adi


Unnati Koppikar


Kaushik M


Doddesh Marebal


Sandeep R K


Ashwin R K


Nandish Humbi

PRAYOG VASANT
Virtual Exhibition of Engineering Exploration
Course Projects

Message from Vice Chancellor

December 07, 2019

Dr. Ashok Shettar
Vice Chancellor,
KLE Technological University,
Hubballi – 580031, India

Engineering Exploration @ KLE Tech

"Engineering Exploration" course is a unique innovation born in the educational ecosystem of KLE Tech. This first-year course is co-designed and team-taught by faculty members from multiple engineering disciplines. It focuses on problem solving, engineering design, multi-disciplinary skills, ethics and sustainability. It follows PBL pedagogy and students work in teams to solve identified problems. Prayog Sharat is an exhibition conducted in last week of spring semester and it serves as a platform for peer learning and celebration of students' success.

Total of 107 projects done by 437 first year students are being showcased in this event.

PRAYOG VASANT
Virtual Exhibition of Engineering Exploration
Course Projects

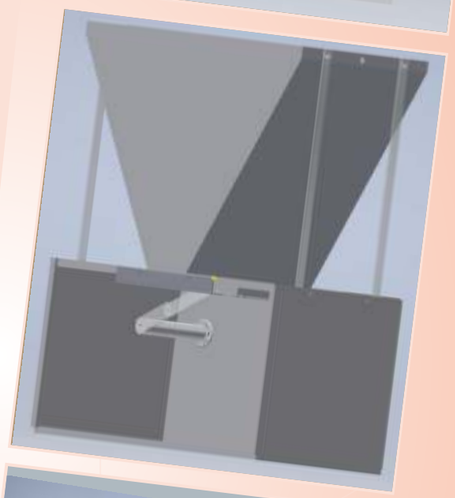
Sl. No.	Need Statements
1	**Catering Robots:** Annapoorna catering services want an automatic food catering bot for a wedding function due to a shortage of labors.
2	**Music Robots:** For an upcoming event at KLE Tech, there is a need for a robot that can play musical instruments to entertain the audience.
3	**Land Dwelling Robots:** Lizards, snakes, spiders which live in arid sandy areas protect themselves from predators by digging themselves in the sand. An insect and reptile museum wishes to mimic this action through a robot.
4	**Robotic Arms with 5 DoF**: In a car manufacturing industry, there is a need for a machine that can able to pick the objects from different directions and drop the objects in the assembly line.
5	**Decoratives:** Jayanthi electronics is into the business of producing indoor decoratives. Customer survey report of the company shows that people get more attracted towards decoratives that have intricate moving mechanisms and displays different patterns of light and color.
6	**Game Machines:** A new shopping mall which has opened in Hubballi is interested to have an innovative interactive robotic game in their gaming center. Though claw machine was mentioned by the client as an example, she is not very keen on that ame machine.
7	**Drawing Robots:** There is a need for a machine that can draw different art forms on different substrates of various shapes.
8	**Self Balancing Robots:** Tony automation is an automation based company which is engaged in designing machines that balance a platform for various purposes like carrying objects from one place to another and holding mobile phones. It is now looking to expand it for other applications.
9	**Drill Bit Dispensers:** Thinkering lab (fabrication center) is in need of an automatic drill bit dispenser, which should be able to dispense and collect drill bits after student authentication.
10	**Agri Mechanization:** Due to lack of labor and to increase yield, few agriculturists in a village want to go for mechanization of the various processes involved in farming. Now they are in need of automated solutions for processes like seed sowing, plantation, and harvesting.
11	**Ball Launchers:** Decathlon Hubballi is introducing a new gaming arena for novice players. It needs automatic ball launching machines for various ball-games.
12	**Carrom Robots:** There is a robotic carrom competition organized in the KLETECH University. The competition will be between two robots controlled by players.

Sl. No.	Need Statements
13	**Measurement Tools:** An industry which manufactures measurement tools is looking for new variety of tools. A tool that can be used to read the value of a physical parameter (angle, pressure, force) and also can be used to set the tool to the required value of the parameter, is of particular interest to the industry.
14	**Clay/Dough Ball Making Machines:** Diminishing skilled labor for rolling sweets the roshogulla dough balls has created a need for a machine which can not only roll roshogullas but also could be extended to make gulab jamun, laddu making and peda. There is also similar need from department of modern horticulture for making clay balls.
15	**Disc Throwing Machines:** Decathlon Hubballi is introducing a new gaming arena for novice players. It needs automatic disc throwing machines for various games.
16	**Automatic Winding Machines:** Wire winded coils are used in motors, solenoids, inductors and many other electrical types of equipment. Today, coil windings are no more preferred by labors. Industrial machines are much efficient and fast in doing this job. An industry which manufactures such machines is interested in making ready a small scale demo machine.
17	**Note Counting Piggy Banks:** A company that manufactures piggy banks wishes to make a smart piggy bank.
18	**Floor Cleaning Robots:** A mall in Hubballi is facing a shortage of human labor to clean the floor. They wish to automate this process by installing floor cleaning bots in the mall. There is a need to design a robot which helps in maintaining cleanliness in the mall.
19	**Robots with Lead Through Programming:** A robot manufacturing industry is interested in showcasing their new robot which has "Lead Through Programming" feature in it. The industry is interested in putting up a demo of a mini-robot that can be trained to draw or write something on paper.
20	**Automatic Titrating Robots:** A pharmaceutical company handles many analytical tests every day. Titration is a simple but essential step in the process. The company wishes to have a machine that conducts the titration of chemicals so that chemists can focus on more complicated analytical tools.
21	**Automatic Tape Dispensers:** Cutting the cellophane tape or band-aid tape is the most cumbersome activity if needed to be done for many times. The gift wrapping or band-aid wrapping becomes considerably easier if we have an automatic tape dispensing machine.

PRAYOG VASANT
Virtual Exhibition of Engineering Exploration
Course Projects

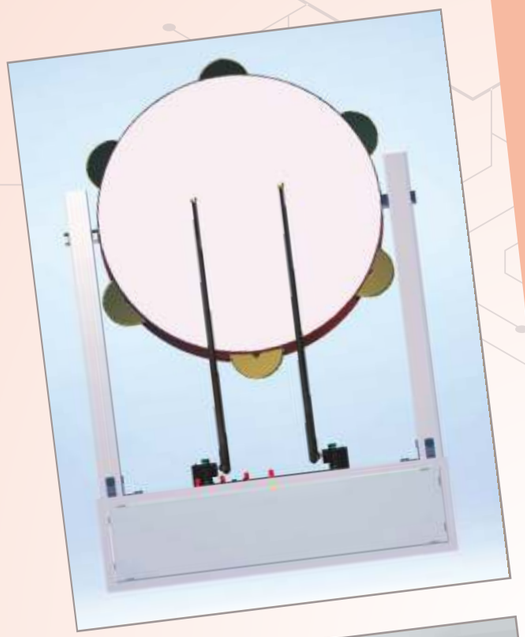
Catering Bot

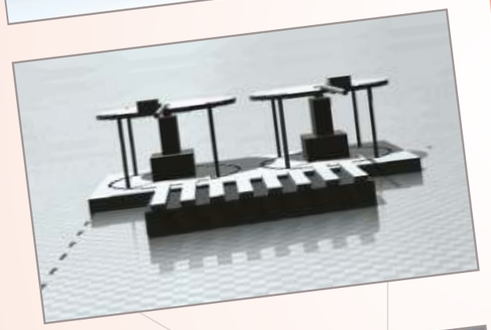
In catering services,there is a need to automate the process of serving food. This need is seen due to two reasons: shortage of labourers and the requirement for serving exact quantities to attendees of the functions. Catering to these needs, students have designed mechatronic prototypes by following the engineering design process. The prototypes demonstrate functions like storing food, picking food, and serving to the plates. During the process of concept generation, the students generated four diverse concepts to address the user's needs. During the phase of detailed design, the students developed 3D models, circuit designs and simulations.

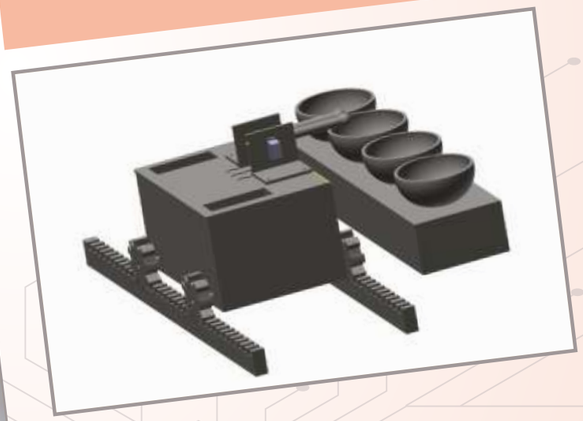


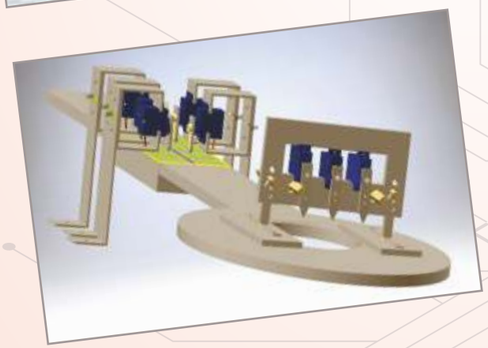
Musical Bot

Scientists have fashioned a walking, swimming, slithering robot that mimics a salamander, the amphibian thought to bear close resemblance to the first land-dwelling vertebrates. By studying the salamander-bot's movements, researchers may learn more about how animals evolved walking abilities during their transition from water to land. In land dwelling bot students teams tried to mimic the reptiles.



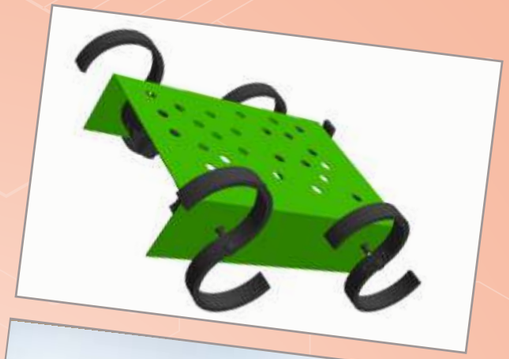


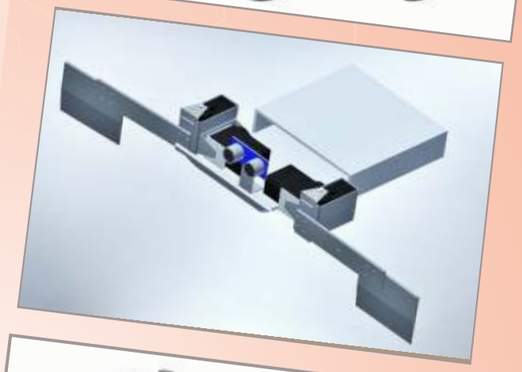


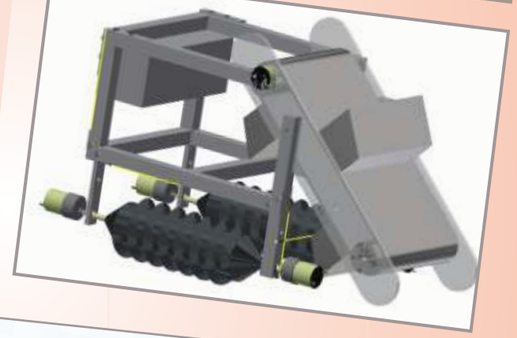


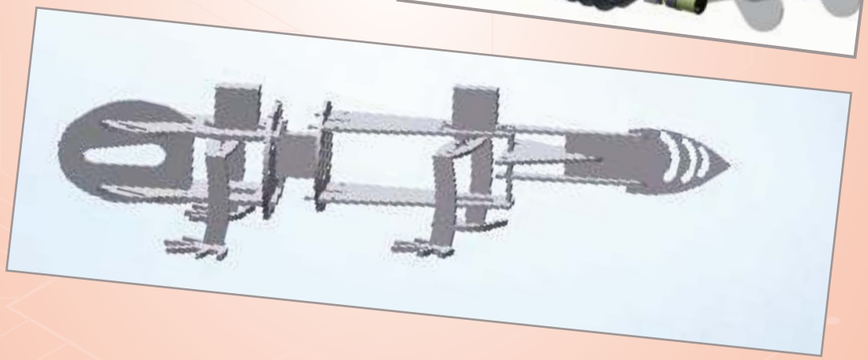
Land Dwelling

Scientists have fashioned a walking, swimming, slithering robot that mimics a salamander, the amphibian thought to bear close resemblance to the first land-dwelling vertebrates. By studying the salamander-bot's movements, researchers may learn more about how animals evolved walking abilities during their transition from water to land. In land dwelling bot students teams tried to mimic the reptiles.

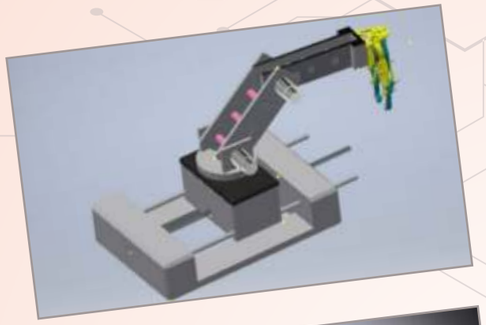


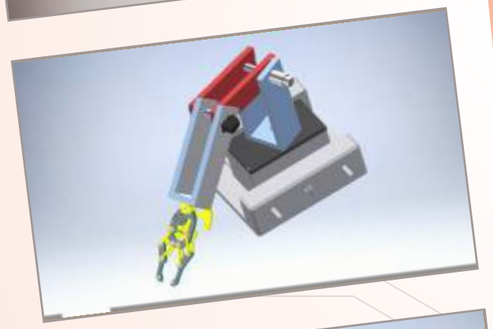






5 DoF Robotic Arm

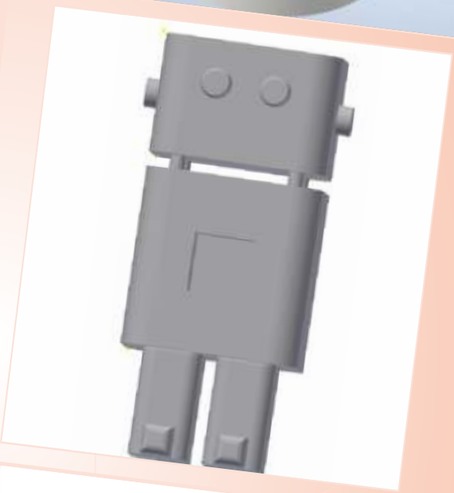


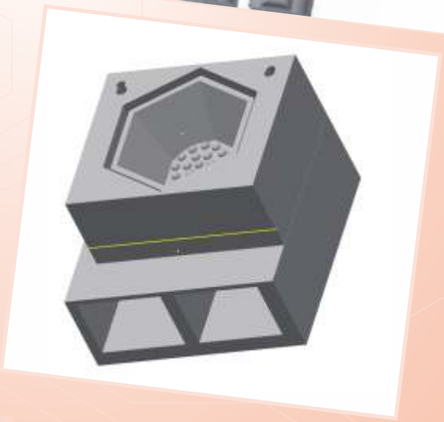


Robotics play a significant role in increasing efficiency and lightening the Industrial manual workload. Despite challenges in the industrial robotic designs, robots are capable of performing various tasks. To address modern problems in the Industrial field, an industrial robot is one of the key technologies. These projects propose a new 5DOF Industry robotic arm design that can become a solution for many manufacturing industries that can pick the objects from different directions and drop the objects in the assembly line. Arduino is used as a controller to control the 5DOF Robotic Arm.

Decorative Bot

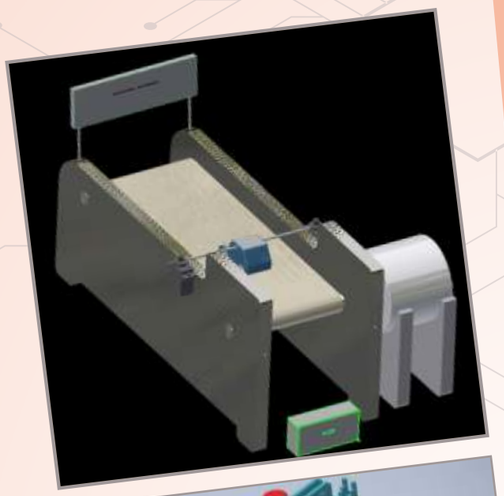
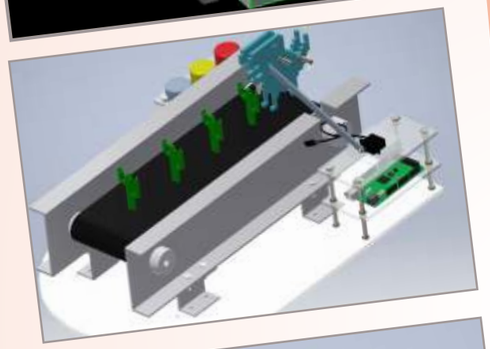
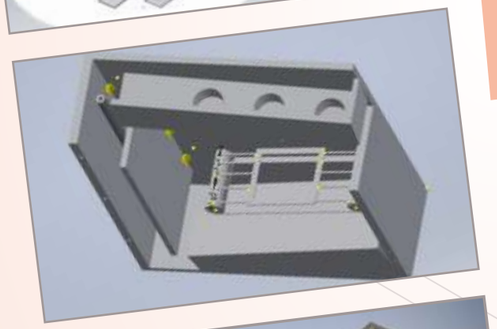
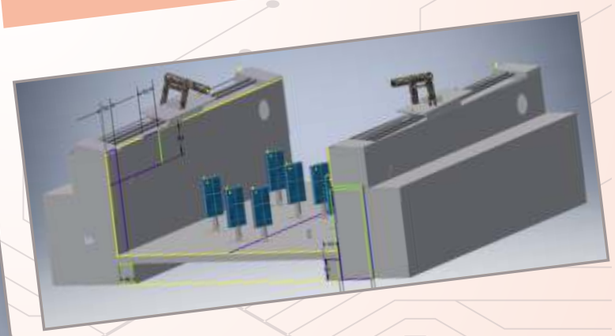
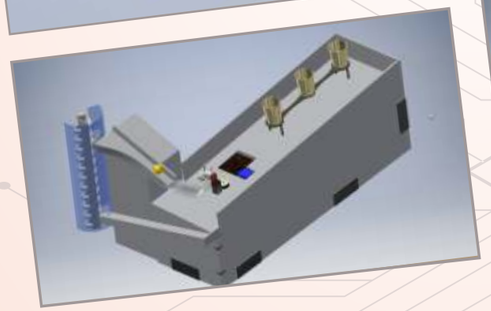
The following set of projects demonstrates the prototypes with variations in the decoratives that have intricate moving mechanisms, displaying different patterns of light, color and music. The prototypes are in the form of tabletop devices (birds flapping their wings, a blooming flower, LED cube) wall hanging devices (clock) as well as entertaining toys (Robot, mood enhancer, attractive study table).





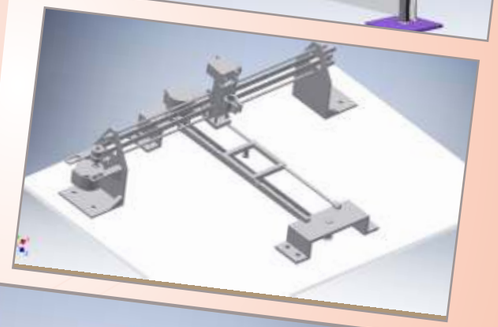
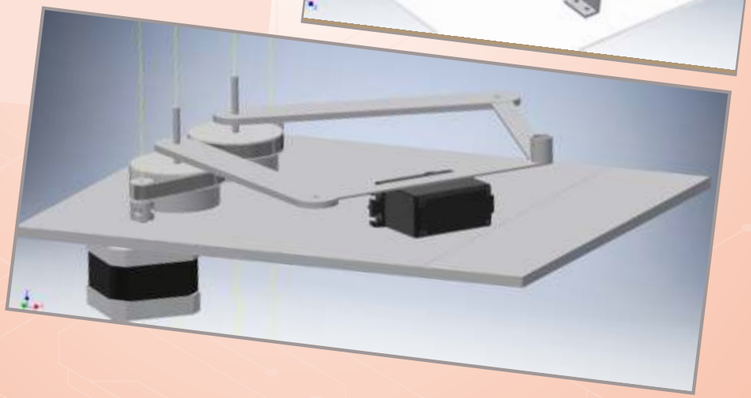
Game Machines

Gaming machines are popular among different age-groups of people. They are frequently seen in gaming zones in malls. These machines are entertaining in nature. The prototypes of the gaming machines exhibit variations like a gesture-controlled, pinball machine, hitting the target with a laser, catching the ball, amongst others. The prototypes have been designed using a different mechanism like rack and pinion, slider, and stud movement. For a few machines, a mobile app facilitates interaction.

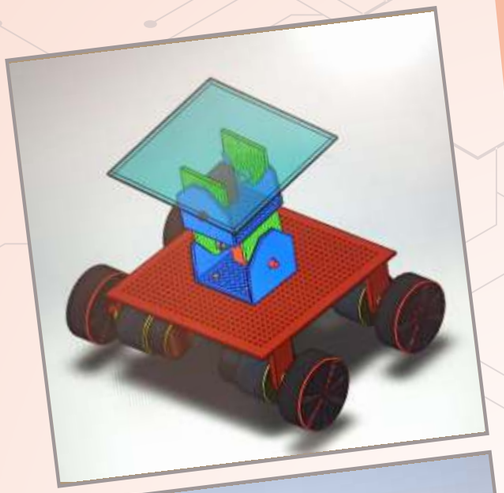






Drawing Bot

Drawing bots make marks on flat surfaces. The drawing bot uses a pencil, pen, or marker. The flat surface is a sheet of paper, but many other combinations of tools and surfaces are possible. These bots have different applications like marking, painting, printmaking, sculpting and in digital media. The students have developed mechatronic projects for different applications like PCB drawing, cylindrical bot, double arm drawer, and vertical drawing bot. The solutions have been implemented using various mechanisms like belt drive, pulley, and crank slider.

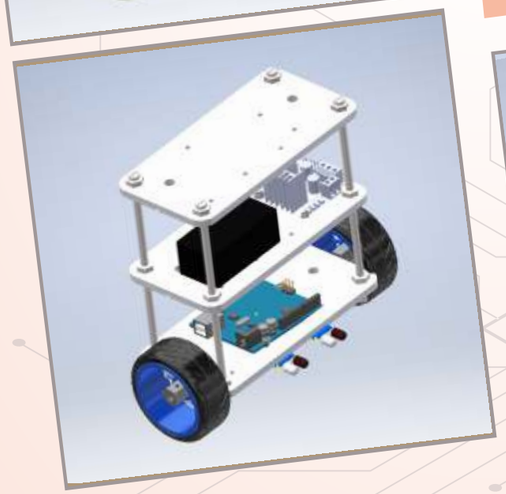



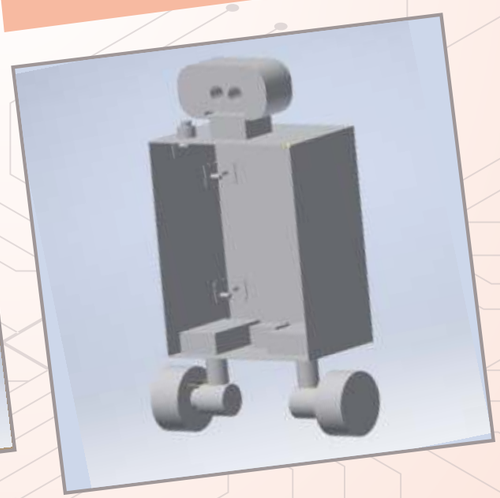
Self Balancing Robot



Self-balancing robots are the ones that balance themselves around X, Y and Z-axes. These bots work with the concept of feedback. Sensors such as IMU sensor, gyroscope and accelerometer are being used in these projects which provide feedback signals thus helping for the balancing operation.

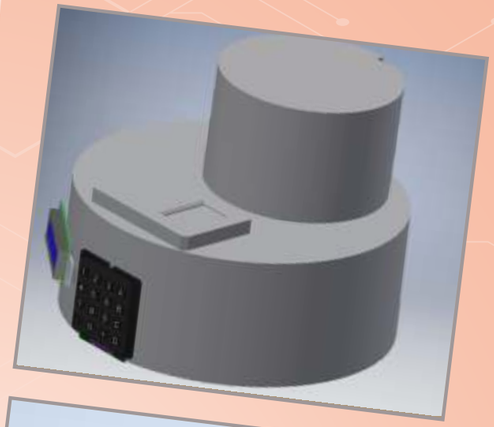
Simulation of the balancing operation was demonstrated using Simulink

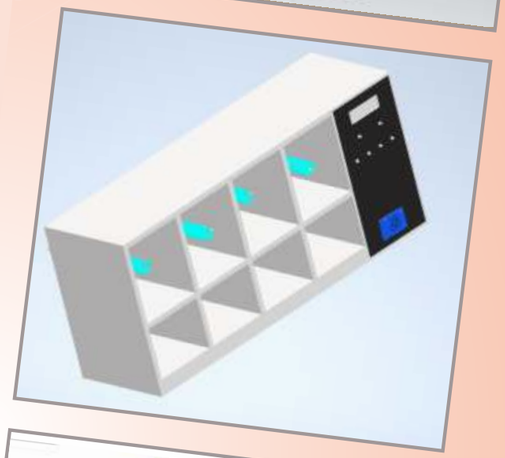


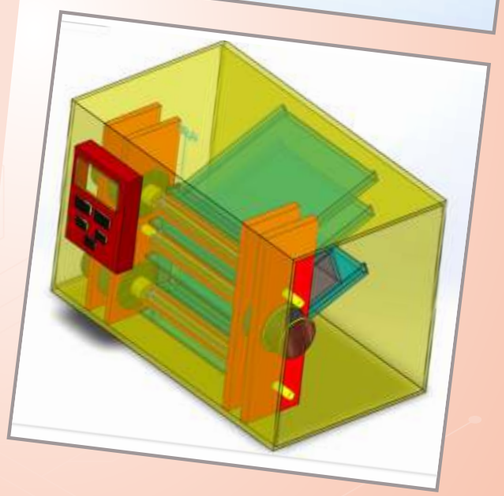


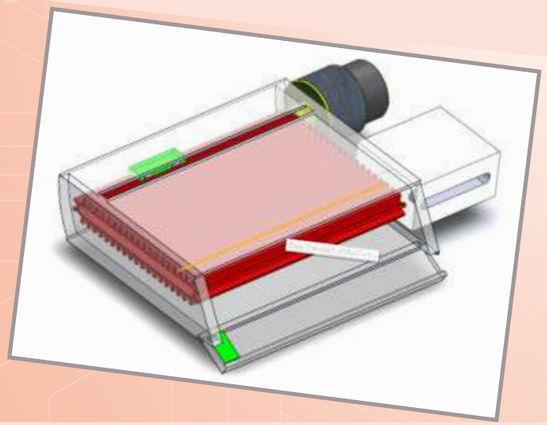
Drill Bit Dispenser

The application of autonomous ROBOTs are evident in this era of automation, these bots are used in almost every field such as Industries, Medical, Agriculture, and human security systems. The autonomous bots are usually pre-programmed to do specific tasks, along with these bots, there are some bots called Lead Through Programming bots which work on Teach-and-Playback mode, which has a wide range of applications where humans can't go and operate as in high-temperature places. The aim of these projects to achieve Teach-and-Playback mode, there are two kinds of bots involved in these, master and a slave bot, master bot teaches and slave bot playback the tasks.

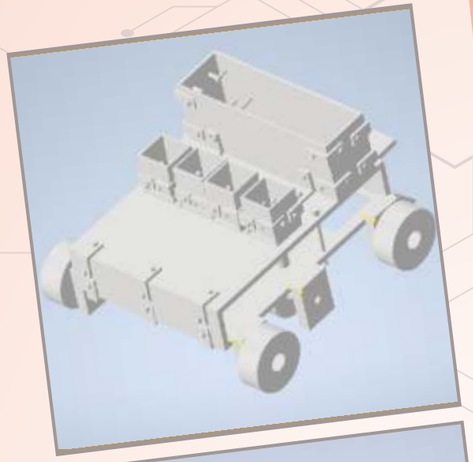


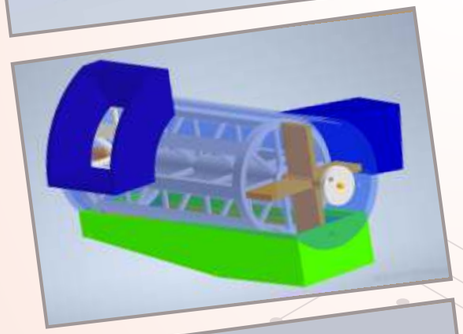


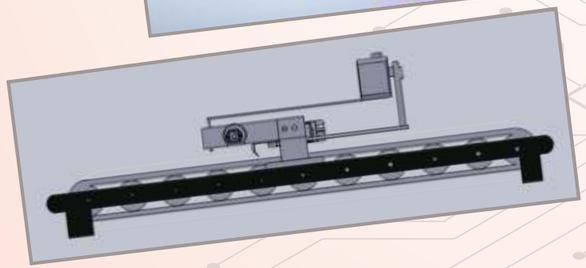




Agri Mechanization



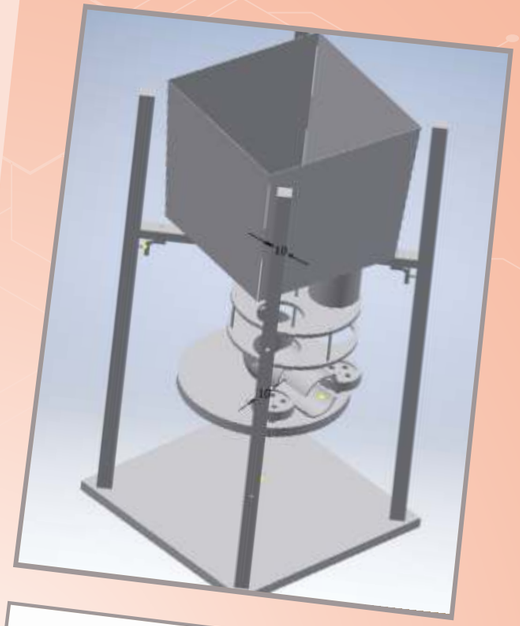


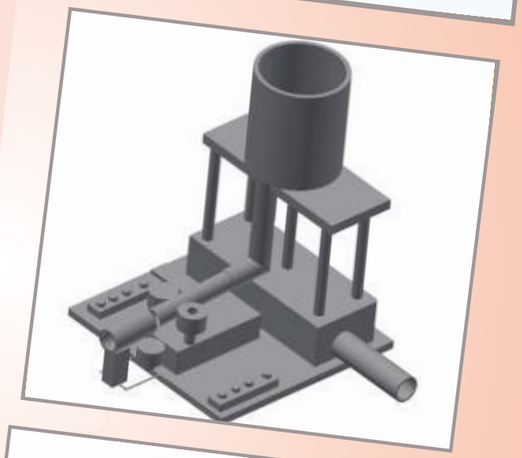


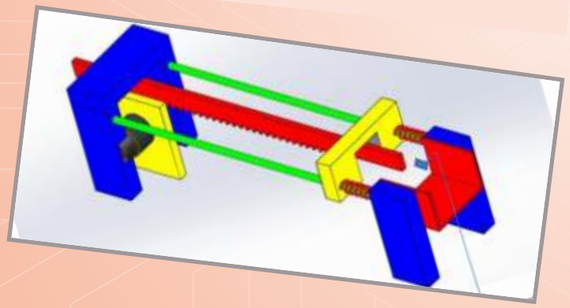
India is one of the largest food grain producers globally, but the agriculture scale is very small, and yields from the farm are very low. In order, to increase the yield, efforts need to be doubled. However, due to urbanization, there is a scarcity of manpower. Thus necessitating a solution that addresses the issues present in the agricultural sector. The following need statement focuses on automating the various processes of farming. Diversity in the following 12 projects is in the form of functions and their designs. Functions like seed sowing in various environments (in farm, pots & trays), compost making & dispensing, pesticide spraying, automation in hydroponic systems, threshing, groundnut peeling, and vegetable harvesting. The projects are simulated using Tinkercad and MATLAB Simulink software.

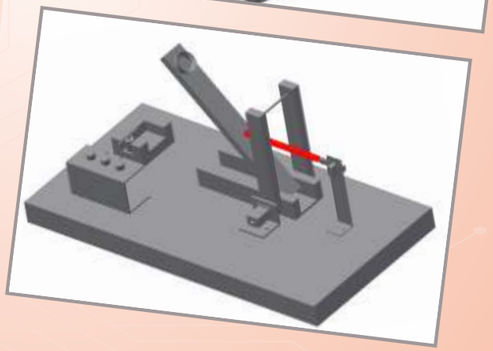
Ball Launcher

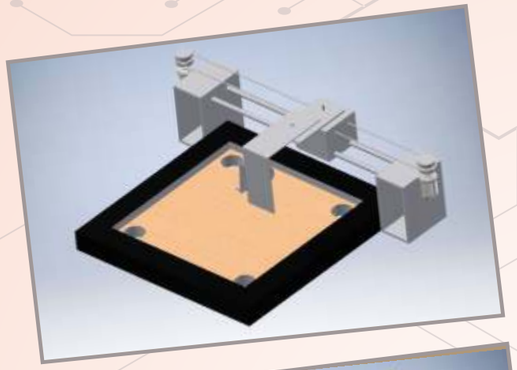
Indoor and outdoor sports have been flooded with ball games. Most of the sports arenas are in need of low-cost ball launching machines. The main purpose of the ball launching machine is to launch the ball for various sports like table tennis, cricket, ball badminton, which helps a novice player. For the aforementioned need, students have designed and developed ball launching projects that handle different types of balls and involve functions like launching a ball at a different angle, counting the number of balls, an indication of the launching, and sensing a ball before the launching. Autodesk inventor and Thinkercad platforms were used to model and simulate the projects.

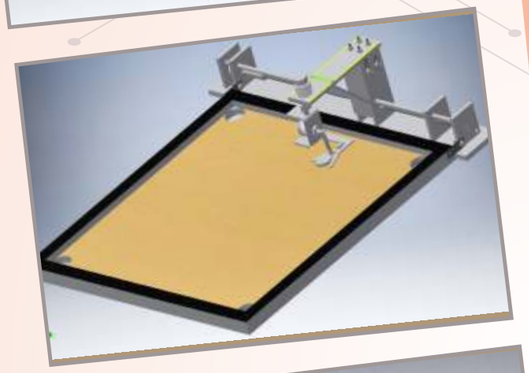


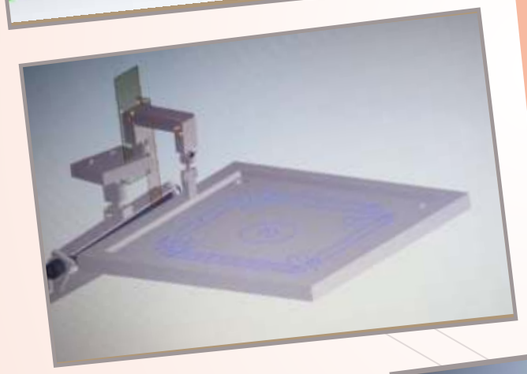










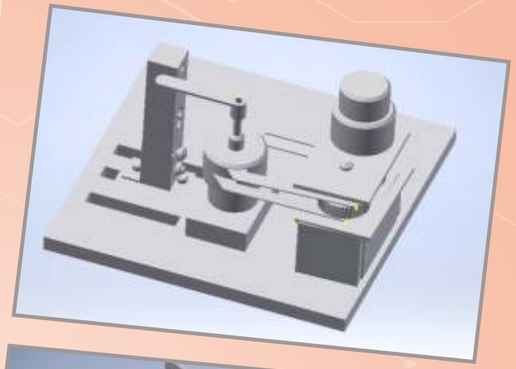


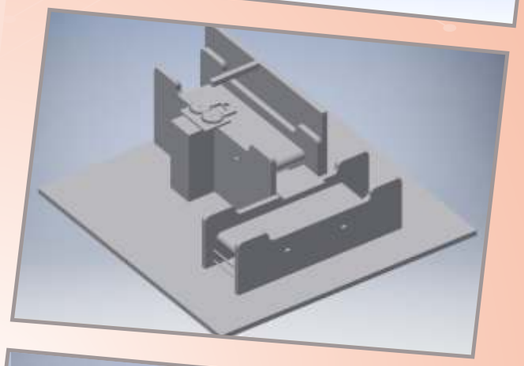
Carrom Robot

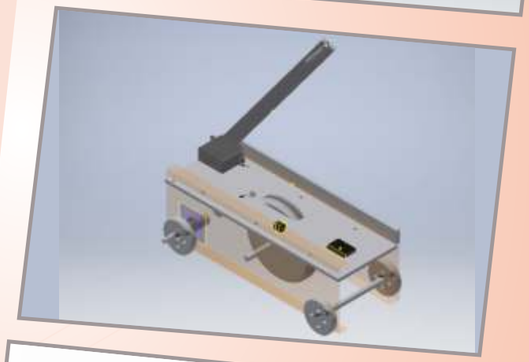
The human-machine interface (HMI) is increasingly important in the industry. A need statement of carrom robot was floated to mimic the HMI. These robots receive input from the player and respond appropriately. A mechatronic prototype of Carrom Robot is designed and exhibits the carrom gaming operations. Autodesk inventor was used to create the virtual models whileTinkercad platform was used to simulate the circuits

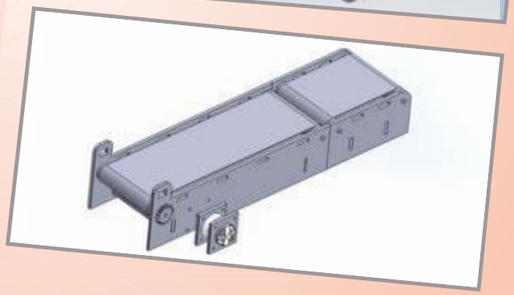
Measurement Tools

Designing and building highly accurate measuring instruments is a highly skilled job. It requires good Engineering skills to build accurate measuring instruments to measure parameters like physical parameter, Electrical parameter, chemical parameters, and many more. Also measuring instruments with high accuracy are in great demand in the field of much different industry like mechanical and Automation industries. Here one such opportunity is created for students to design and build a simple measuring tool. The tools specifically focus on measuring physical parameters like height, diameter, speed, and torque.

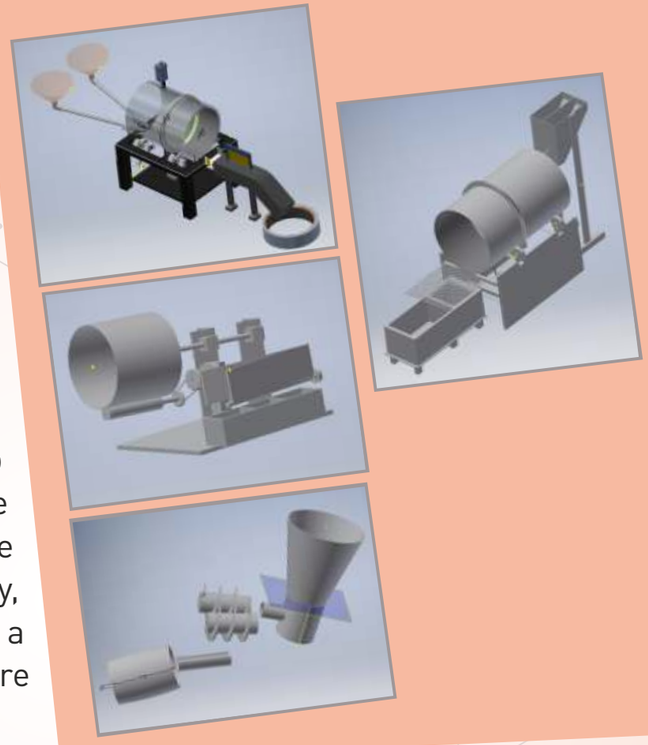








Clay Dough Ball Making Machine



Seed Ball Making Machine

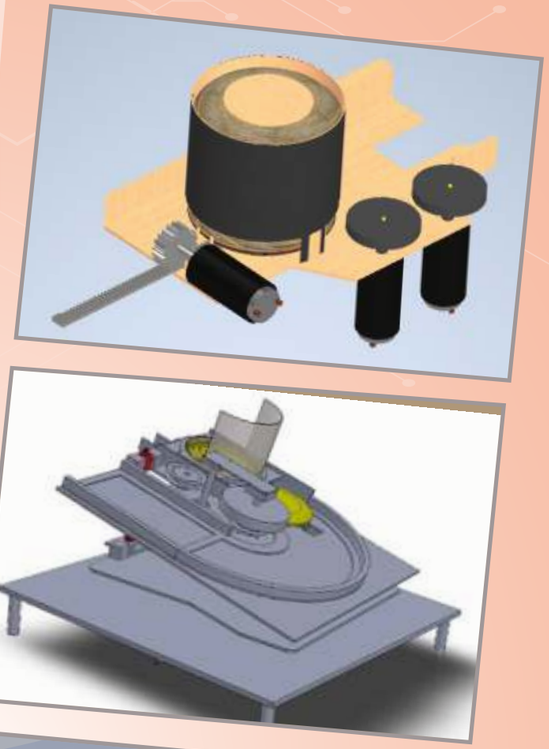
The increasing demand for planting more trees in order to maintain sustainable development of society and to curb global warming by mitigating greenhouse gases has led to the making of a seed ball making machine. Seed balls, also known as "earth balls" consist of a variety of different seeds rolled within a ball of clay. Clay balls/seed balls are made using clay, a binder, and a particular seed that is intended to be sown and grown. Students have proposed the machine in which the actuators are used for adding clay, water, binding, and mixing it with a seed inside. All the functions are controlled by Arduino.

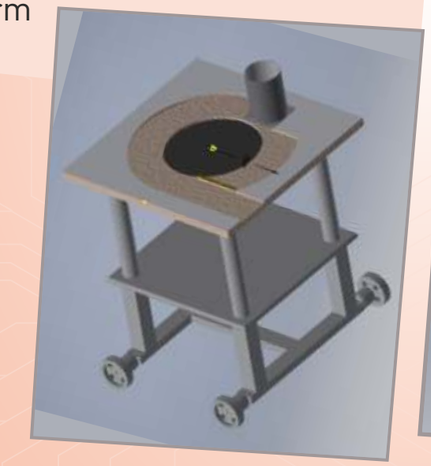
Dough Ball / Laddu / Peda Making Machine:

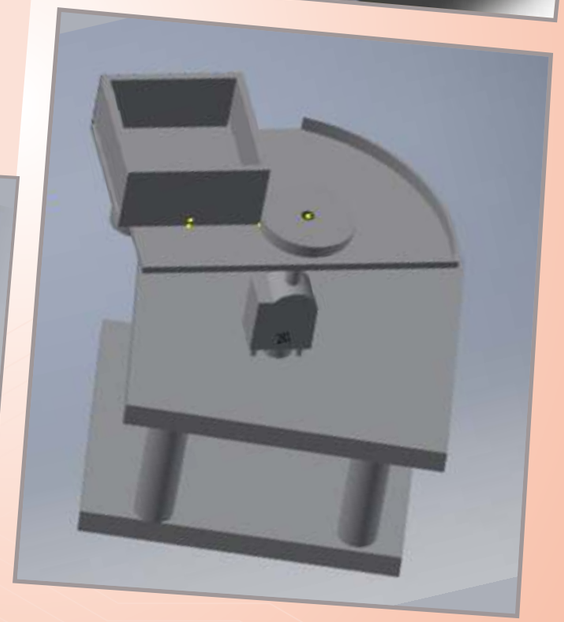
Dharwad pedas are very famous sweets of northern Karnataka and are being produced for decades with traditional methods, which is labour-intensive and slow. A semi-automatic machine is hence needed for the hour for such food processing industries which will increase productivity. Students have proposed the design of machines in which rollers roll the dough and cutter cuts into pieces of standard sizes and further the pieces of dough/laddu /peda goes through another rolling operation before it comes out in spherical or any desired shape. Arduino platform is used for controlling the machine with several motors for actuation and sensors for feedback.

Disc Throwing Machine

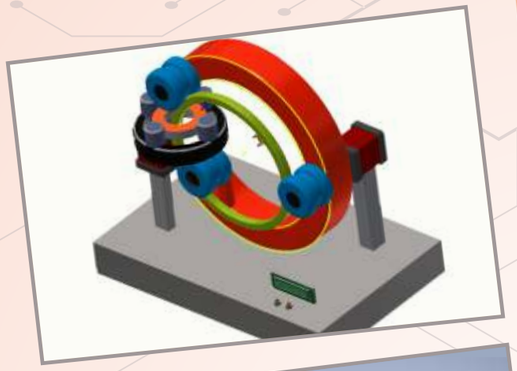
Automation has become part of every sector, and the sports sector are not an exception. Automatic launching of balls and discs are some of the requirements. The following need statement focuses on one such requirement of throwing the discs. In addition to the primary need of throwing discs teams have included additional features that include angle setting, loading of the discs, sensing of discs, throwing the disc at different distances and an indication of completion. Prototypes were modelled using Autodesk inventor and simulated on Simulink and Tinkercad platform

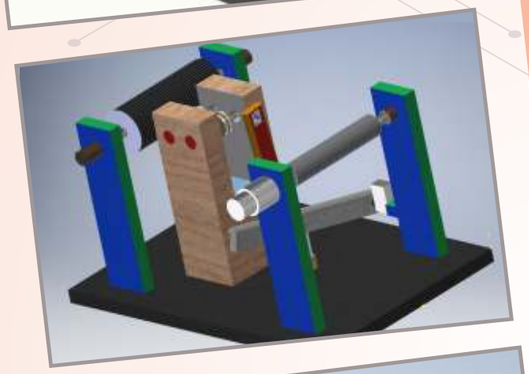


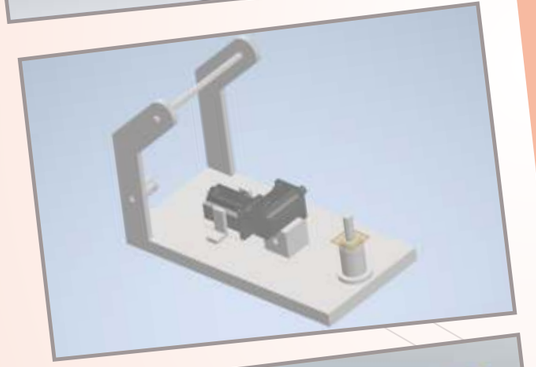


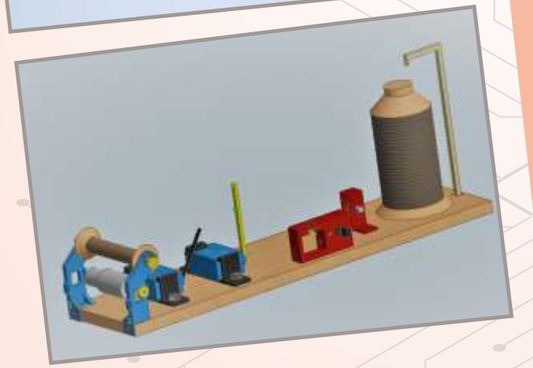


AUTOMATIC WINDING MACHINE





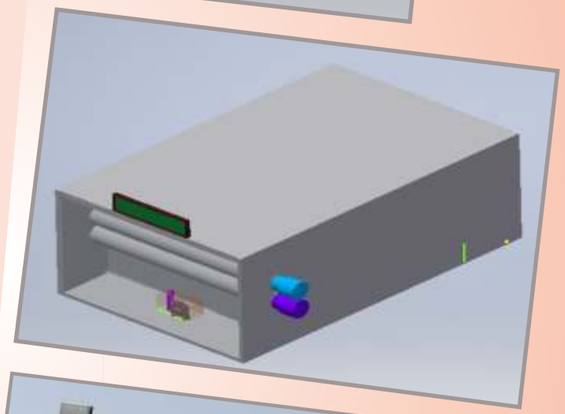


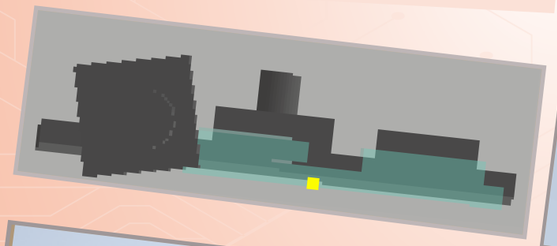


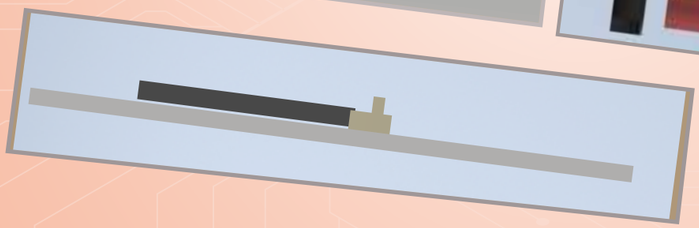
Winding machines have a variety of applications in electrical & textile industries. The job associated with winding is tiring and time-consuming. Thus to cater to this need, students propose to develop a fully automated winding machine. Diversity among these projects is in terms of the use of different materials for winding - silk thread, yarn, copper wire, and satin ribbon. The winding is done by suitable methodology depending on the type of material used. Features like taking input from the user with respect to the number of turns and slots are considered along with winding. Further, additional features in some of the projects include indicating the completion of winding. Counting the number of turns. Projects were simulated using the Tinkercad software tool while all the virtual models were created using Autodesk Inventor.

Note Counting Piggy Bank

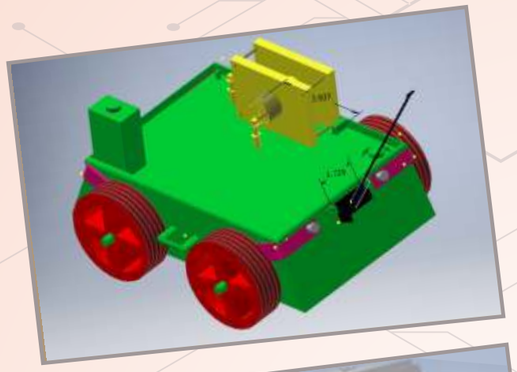
Saving small amounts of money for future use is fascinating, especially for children. There are small pot types of piggy banks available; however, it will be exciting for anyone to use a piggy bank that can automatically count the amount one puts into the bank.
The engineering design process was followed to design a Note Counting Piggy Bank that can detect the currency, identify its face value by reading its colour, pull it in and display the information on a display. 3D Modelling of the proposed design was done, and automation was done using Arduino programming

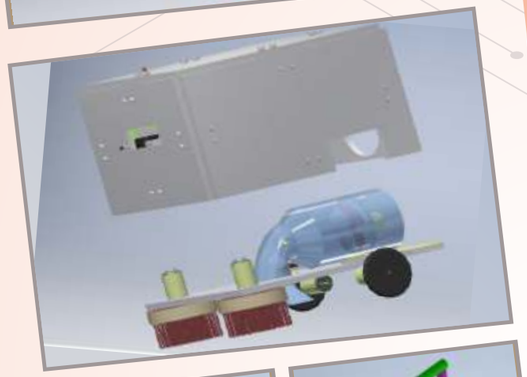


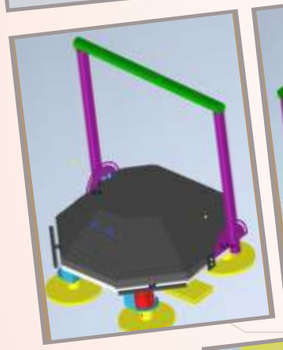


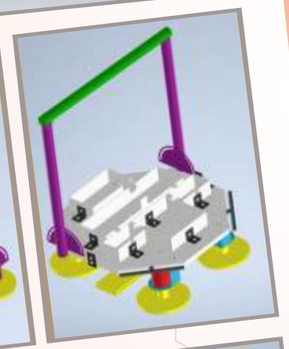


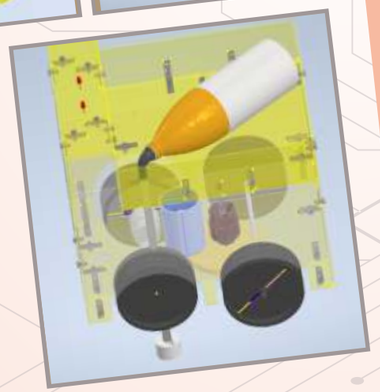
Floor Cleaning Bot







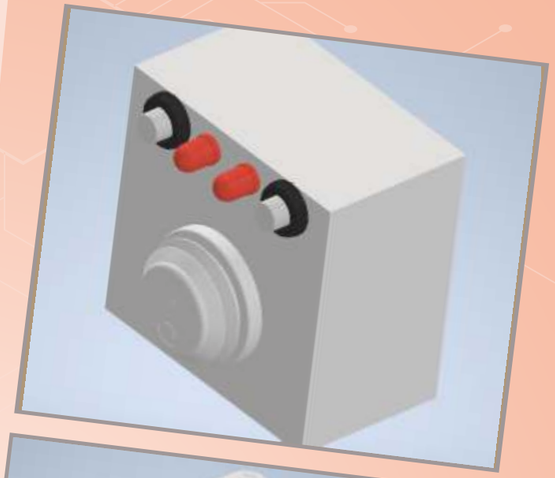


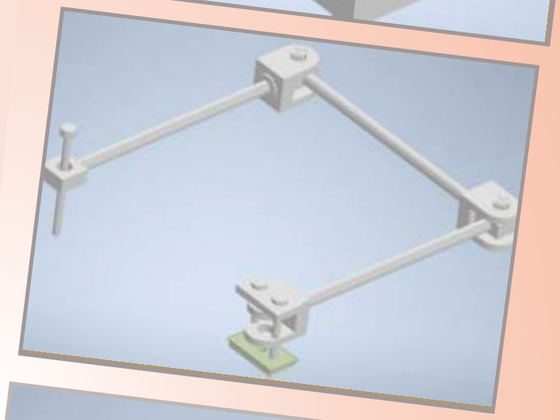


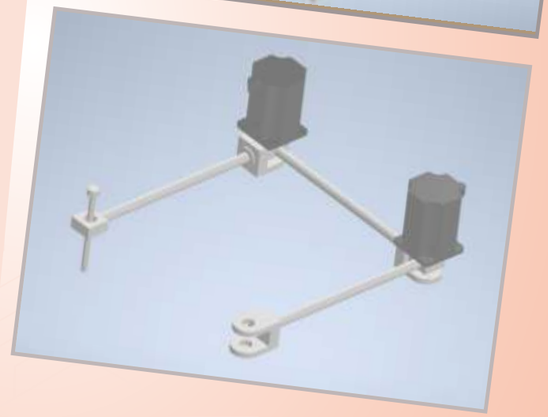
During this COVID-19 pandemic, “Cleaning Staff” were recognized as the real heroes. This pandemic showed us the importance and necessity of Cleaning. During the lockdown, while everyone was confined to their home, people had to keep their houses clean. Mopping and Sweeping were a few laborious tasks that most of us experienced during the lockdown. The students of KLE Tech have come up with many unique automated floor cleaning solutions to help people clean their floors and keep them clean and shiny. The solutions have been designed to perform different functions such as sweeping, mopping, vacuuming, and obstacle detection. The floor cleaning bots can be operated using a mobile app. Matlab Simulink and Arduino platforms are used to control the various mechanisms.

Lead Through Programming

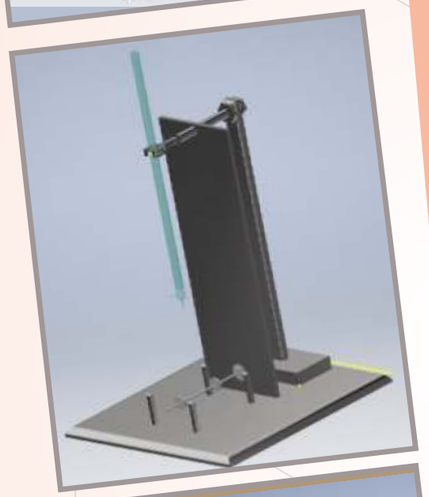
The application of autonomous robots are evident in this era of automation, these bots are used in almost every field such as industries, medical, agriculture and human security systems. The autonomous bots are usually pre-programmed to do specific tasks, along with these bots, there are some bots called lead through Programming bots which works on Teach-and-Playback mode, which has a wide range of applications where humans can't go and operate as in high-temperature places. The aim of these projects to achieve Teach-and-Playback mode, there are two kinds of bots involved in these, master and a slave bot, master bot teaches and slave bot playback the tasks.





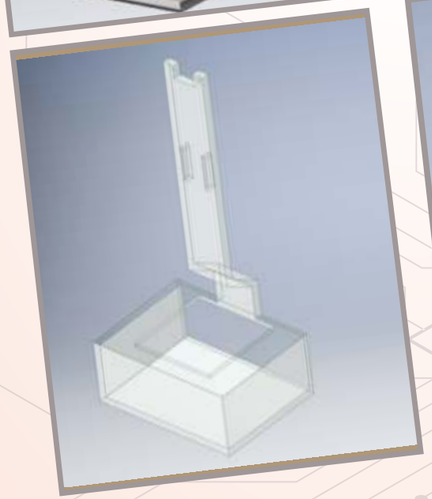


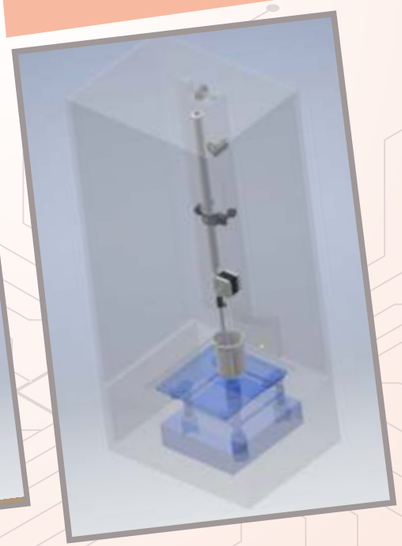
Automatic Titrating Robot



Need statement: Automatic Titrating bot

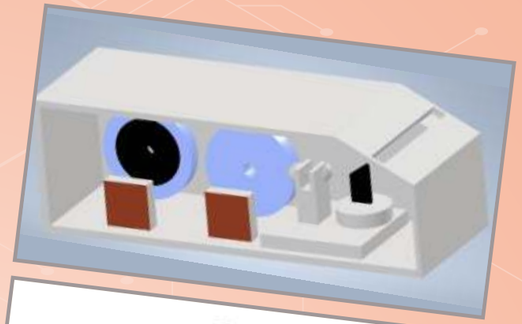
Titrating is one of the important and simple experiments. Automating the titrating action allows the experimenter to focus on other important tasks. This section of projects showcases an automatic titrating bot that can hold the conical flask/beaker, shake it during titration, release solution from the burette in a controlled manner and then identify the end of reaction by detecting the change in color of the solution in conical flask/beaker. Students use 3D modeling, Arduino programming, and integration to build a virtual prototype.

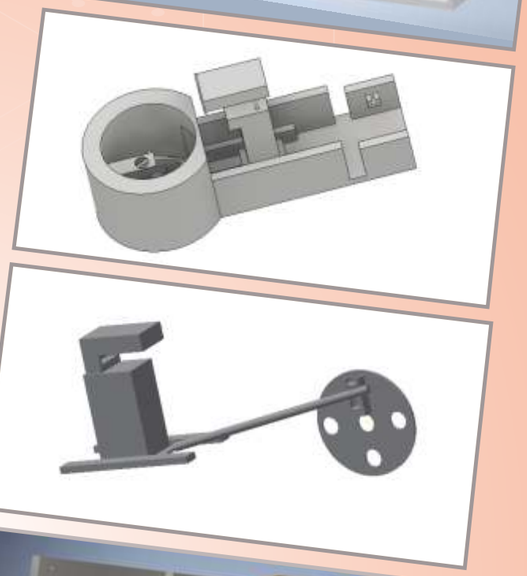


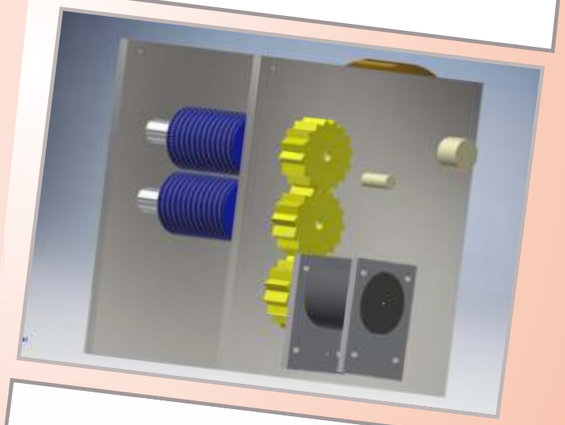


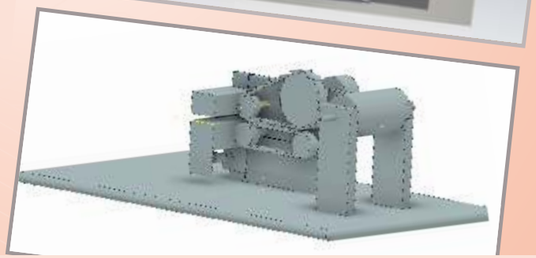
Automatic Tape Dispenser

Packing of products and gifts is one of the tough jobs at an industrial unit, gift center, and shops. Providing the right packing with labels and glues is most important. Automatic Tape Dispenser (ATD) is one solution to the problem. ATD is made up of standard material, is user friendly, highly efficient, portable, and economical. ATD machine is able to dispense and cut different adhesive tapes to cater to the requirement of the user. It is able to dispense and cut different lengths of tape-based on the user input effectively and should work continuously for heavy usage. ATD is able to work with electric or battery connections. It is able to indicate the total length of dispensed tape and the remaining tape in the tape unit.









AWS Cloud

9th to 14th July 2020

School of Computer Science and Engineering

KLE Technological University

Brochure

About the Workshop

This AWS workshop includes the latest changes in SAA-C02 and also covers the concepts of SAA-C01. This develops skills like AWS Cloud, IAM, Lambda, Redshift, EC2, S3, CloudTrail, Global Accelerator, FSx and more. Workshop aims to work on various tools of AWS cloud platform and create highly scalable, highly available and fault-tolerant SaaS applications.

Topics

- AWS Core services
- S3 overview
- EC2 Overview
- Virtual Private Cloud
- NO-SQL database dynamoDB
- AWSLambda

Resource Persons

Mr. Sandip Patel

Assistant Professor
(Charusat University)

Objectives

By the end of workshop participant will be able to:

To acquiant the participant with the various services provided by the AWS cloud platform and to build a workable knowledge of all the technology used to build IT infrastructure of any small/large on any AWS cloud platform.During 6 day of workshop:Amazon web services like S3,EC2,VPC,IAM,Databased, Cloud watch etc, along with live demo of these services on AWS console UI and many more will be covered

Registration

For more details contact
Dr. Narayan D G
Professor, School of Computer Science
KLE Technological University
Vidyanagar Hubli-580031
Mob: 9448635627
Email: narayan_dg@kletech.ac.in

For registration click on the following link:

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Chief Patron:
Dr. Ashok Shettar
Vice Chancellor
KLE Technological University
Hubballi.

Patrons:
Prof. N.H.Ayachit
Registrar
KLE Technological University
Hubballi.

Dr. P.G.Tewari
Principal
B.V.Bhoomaraddi college of
Engineering & Technology
Hubballi.

Convenors:
Dr. Meena S.M.
Head
SoCSE
KLE Technological University
Hubballi.

Organizing Committee
Prof. Narayan D.G.
Prof. Pooja Shettar

About Instituion

KLE Technological University (KLE Tech) has its roots in one of the premier engineering institution of Karnataka, B. V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. In 2014 the college was recognized as a state private University by Government of Karnataka. The rich heritage of BVB College as one of the best engineering college in Hubli combined with brand equity of KLE Society are the starting points for KLE Technological University to emerge as a University with a national distinction.

About Department

School of Computer Science & Engineering offers graduate, post graduate and doctorate degrees. The Board of Studies (BoS) compromises of experts from academia and industry. The curriculum encompasses core computer science courses and facilitates for experiential learning. School has specialized laboratories in the areas of machine learning, parallel computing, distributed and cloud computing and computer vision.The Department is consistently having a good placement record top hiring companies including Microsoft, Wal-Mart, Juniper, Akamai, SAP, Sony, Informatica, etc.

KLE SOCIETY'S
KLE TECHNOLOGICAL UNIVERSITY

KLE TECH

Six-day Workshop on

aws

09 to 14 July 2020

AWS Cloud workshop Overview

Virtual AWS workshop includes the latest changes in SAA-C02 and also covers the concepts of SAA-C01. This develops skills like AWS Cloud, IAM, Lambda, Redshift, EC2, S3, CloudTrail, Global Accelerator, FSx and more. Workshop aims to work on various tools of AWS cloud platform and create highly scalable, highly available and fault-tolerant SaaS applications.

AWS Cloud (9th to 14th July 2020)

Date	Session	Topics
Day 1:	S1 - 9.30AM to 12.00PM	• Introduction of AWS console • Overview of AWS Core services • Deep dive into IAM with hands-on • DEMO: Introduction to AWS Identity and Access Management (IAM)

	S2 - 12.00Pm to 1.00PM	• S3 overview
		  ○ Versioning
		  ○ Life cycle
		  ○ Static Website hosting
		  ○ Access Control
		  ○ Security & Encryption
		• DEMO 1: Create an AWS S3 bucket and upload a file
		• DEMO 2: Host Static website using s3

	1.00 to 2.00PM	Lunch Break
	S3 - 2.00PM to 4.00PM	• EC2 Overview • DEMO 1: Create an EC2 instance and host website • DEMO 2: Create an image of EC2 instance and Launch an instance from that AMI in a different region.
	S4 - 4.00PM to 5.00PM	• EBS & EFS overview • Comparison of all EBS type • DEMO: Create a snapshot and mount EBS volume.
Day 2 :	S1 - 9.30AM to 11.00AM	• EC2 windows server • EBS comparison • Basics of load balancer
	S2 - 11.00AM to 1.00PM	• Classic load balancer & Network load balancer with demo • Basics of auto scaling with demo
	1.00PM to 2.00PM	Lunch break
	S3 - 2.00PM to 5.00PM	• Application load balancer overview • Application load balancer hands-on • Auto scaling with application load balancer demo
Day 3:	S1 - 9.30AM to 11.00AM	• Introduction about Virtual Private Cloud • Demo of VPC

	S2 - 11.00AM to 1.00PM	• Deep dive into Virtual Private Cloud • Overview of VPC peering
	1.00AM to 2.00PM	Lunch break
	S3 - 2.00PM to 4.00PM	• Demo of VPC peering
	S4 - 4.00PM to 5.00PM	• Perform handson of EFS
Day 4:	S1 - 9.30AM to 11.00AM	• Quiz -1 & doubt solving • Introduction about Database • Deepdive into RDS
	S2 - 11.00AM to 1.00PM	• Demo : Create database server and access using workbench • Overview of RDS features like Multi AZ and Read replica
	1.00AM to 2.00PM	Lunch break
	S3 - 2.00PM to 4.00PM	• Introduction about NO-SQL database dynamoDB • Demo: Create dynamodb database and explore its functionality in details
	S4 - 4.00PM to 5.00PM	• Introduction about Machine learning services like polly and Rekognition
Day 5:	S1 - 12.00AM to 1.00PM	• Introduction about cloudfront and Route53 • Perform hands on of Cloudfront
	1.00AM to 2.00PM	Lunch break
	S3 - 2.00PM to 4.00PM	• Introduction about AWS Lambda • Demo: Create 2 types of Lambda function
	S4 - 4.00PM to 5.30PM	• SNS & SQS overview • Demo: Integrate both the service with AWS Lambda

Day 6:	S1 - 9.30AM to 11.00AM	• Cloud Formation
		  ○ Create Stack
		  ○ Update Stack
		  ○ Delete stack

	S2 - 11.00AM to 1.00PM	• Project Discussion + Quiz
	1.00AM to 2.00PM	Lunch break
	S3 - 2.00PM to 3:30PM	• Doubt Solving Session and Exam Tips

Resource Person

Sandip R Patel is working as Assistant Professor in Charusat University, Gujarat. He has completed his Bachelor of Engineering in Information Technology in the year 2012, completed his M.Tech in computer engineering in the year 2015. He is expertise in Amazon Web Services, Fog & Edge Computing. He also has good knowledge about Cloud computing, Virtualization and IoT. He is certified cloud practioner of AWS as he has completed the certification on AWS Certified Developer-Associate, AWS Certified Solution Architect-Associate, Cisco Certified Network Associate.

KLE Technological University
Creating Value
Leveraging Knowledge

Centre for Engineering Education Research
KLE Technological University
B. V. Bhoomaraddi Campus, Vidyanagar, Hubballi (India)

Workshop on Knowledge Management : Systematic Literature Review and Reference Management Tool-Citavi

Date	March 16, 2020
About the workshop	The sound base for a research study comes from an in-depth literature review. Literature review is a time-consuming and a rigorous endeavour because literature across many years has to be synthesised. To ease this process, A workshop on how to conduct a systematic literature review using a reference management tool is organised for the members of Centre for Engineering Education Research. Systematic literature review is a methodology in itself. The training focuses on the Theoretical underpinnings of systematic literature review. It will discuss a case study developed using the Reference Management Tool: Citavi.
Coordinator and Resource Persons	Ms. Preethi Baligar Asst Professor PhD Student in Engineering Education Email: preethi.b@kletech.ac.in
Who can apply ?	Faculty members from the centre for engineering education research, KIE Tech who are interested in research or are conducting research are invited to this workshop. You may please email the coordinator on or before March 10th, 2020.
Procedure for registration	For further details on participating in this program, please contact the coordinator.
Venue	Meeting Room, Centre for Engineering Education(CEER), R H Kulkarni Lecture Hall Complex, KLE Tech.

CENTRE FOR ENGINEERING EDUCATION RESEARCH

Workshop on Knowledge Management: Systematic Literature Review and Reference Management Tool

About the workshop

The sound for a research study comes from an in-depth literature review. Literature review is a time-consuming and a rigorous endeavour because literature across many years has to be synthesised. To ease this process, A workshop on how to conduct a systematic literature review using a reference management tool is organised for the members of Centre for Engineering Education Research.

Systematic literature review is a methodology in itself. The training focuses on the Theoretical underpinnings of systematic literature review. It discussed a case study developed using the Reference Management Tool: Citavi.

The workshop was conducted by Ms. Preethi Baligar, AsstProfessor, and PhD Student in Engineering Education on March 16, 2020

KLE Technological University
Creating Value Leveraging Knowledge
Centre for Engineering Education Research

Attendance Sheet

Workshop on Knowledge Management: Systematic Literature Review and Reference Management Tool (CITAVI)

Date	March 16, 2020
Duration	9.30 am to 12.30 pm

Sl.No	Name of Faculty	Signature
1	Mr. Sanjeev Kavale	
2	Mr. Kaushik M	
3	Ms. Madhu Asundi	
4	Ms. Jyothi Gadad	
5	Ms. Radhika Amashi	
6	Ms. Unnati Koppikar	
7	Mr. Vinay Talageri	
8	Mr. Raghuraj Adi	
9	Dr. Gopalkrishna Joshi	
10	Mr. Nandish Humbi	

ABOUT THE WORKSHOP

KLE Technological University - Intellectual Property Facilitation Cell Hubballi is jointly organizing workshop on Awareness and Importance of Intellectual Property Rights at MBA Seminar Hall, KLE Technological University campus, Vidyanagar, Hubballi at 10 am on Saturday 7th March 2020.

The workshop aims to provide the information and awareness on Intellectual Property Rights (IPR) and Intellectual Property Facilitation Cell (IPFC). The targeted audience would be students and faculties, from Engineering Colleges, Universities. Pharmacy, Law and Diploma Colleges. Advocates, entrepreneurs, MSME Representatives, Business and Industrial association representatives. This workshop will cover following topics of IPR.

The key topics that would be covered during the workshop are:

- What is Intellectual Property?
- Importance of Intellectual Property for Innovators, Business and education institutes.
- Types of Intellectual Property.
- How to protect Intellectual property?
- What is IP Facilitation Cell?
- What can IPFC can do for you?
- Who should use IPFC?

RESOURCE PERSONS

Dr. Ravi C. Guttal
Head IPFC , Director CIPD, KLE Tech University, Hubballi.

Smt. Archana K.
Asst. Professor, Karnataka State Law University, Hubballi.

Dr. Arun Y Patil
Asst. Professor, School of Mech. Engg. KLE Tech University, Hubballi

Adv. Sujata Laxmeshwar
Legal Counsel, IPFC, KLE Tech University, Hubballi

There is no registration fee for workshop participants. As space is limited, your confirmation of attendance will be greatly appreciated. Participants interested in attending the workshop can confirm their participation on or before 5TH March, 2020 by mail to vinay_t@kletech.ac.in. Or text message to 9916384216 or 7760696662 or May contact

by scanning the QR Code

The coordinators of the Program for more information.

Er. Vinay Tigadi (M: 9916384216) or

Adv. Sujata Laxmeshwar (M: 7760696662)

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MSME
Ministry of MSME, Govt. of India

KLE TECHNOLOGICAL UNIVERSITY & INTELLECTUAL PROPERTY FACILITATION CELL HUBBALLI

JOINTLY ORGANIZING

ONE DAY WORKSHOP ON

AWARENESS AND IMPORTANCE OF INTELLECTUAL PROPERTY RIGHTS

DATE : 7TH MARCH, 2020 @ 10.00 AM
VENUE : MBA SEMINAR HALL

KLE Technological University
Vidyanagar, Hubli-580031, Karnataka. (INDIA)
Tel: 0836 - 2378335

ABOUT THE MSME

Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and this sector contributes enormously to the socio-economic development of the country.

The role of the M/o MSME and its organizations is to assist the States in their efforts to encourage entrepreneurship, employment and livelihood opportunities and enhance the competitiveness of MSMEs in the changed economic scenario. The schemes/ programs undertaken by the Ministry and its organizations seek to facilitate / provide:

i) Adequate flow of credit from financial institutions/banks
ii) Support for technology up gradation and modernization
iii) integrated infrastructural facilities
iv) Modern testing facilities and quality certification
v) Access to modern management practices;
vi) Entrepreneurship development and skill up gradation through appropriate training facilities
vii) Support for product development, design intervention and packaging
viii) Welfare of artisans and workers
ix) Assistance for better access to domestic and export markets and
x) Cluster-wise measures to promote capacity-building and empowerment of the units and their collectives.

ABOUT KLE TECHNOLOGICAL UNIVERSITY

KLE Technological University (KLE Tech) has its roots in one of the premier engineering institution of Karnataka, B. V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. The founding organization KLE Society, Belgaum, established BVB College in 1947 with an aspiration of creating an institution that would lay the foundation of modern engineering education in northern region of Karnataka.

In 2014 the college was recognized as a state private University by Government of Karnataka. The rich heritage of BVB College as one of the best engineering college in Hubballi combined with brand equity of KLE Society are the starting points for KLE Technological University to emerge as a University with a national distinction.

ABUOT INTELLECTUAL PROPERTY FACILATATION CELL (IPFC)

KLE Technological University with the support and Grants from MSME Department Government of India has setup Intellectual Property Facilitation Cell(IPFC) with the vision to serve local entrepreneurs, industries, MSMEs, educational institutes and innovators. The IPFC shall ensure that MSMEs and stakeholders have access to state of art processes and tools for

1. Innovation
2. Management and protection of Intellectual Property (IP) and use Innovation and IP as a tool to enhance their businesses.

OBJECTIVES OF IPFC

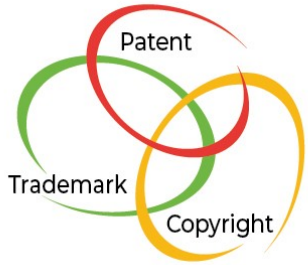
Awareness creation
The Cell shall conduct seminars and workshops to create awareness about Intellectual Property and its Rights (IP & IPR)

IP Landscaping
KLE-Tech-IPFC shall conduct IP landscaping for stakeholders using specialized software tools and databases

IPR Processing support to MSME
IPR filing processing (national and international) guidance to innovators and businesses using proven processes, templates and tools. To provide guidance on IP rights and infringement of IP rights and suggest legal course for the same.

IP Monetization
Provide guidance and knowledge regarding IP monetization via technology transfer, collaboration and Joint Venture (JV) partnerships

Collaboration
With the motto to provide support and guidance to entrepreneurs and industries KLE-Tech-IPFC shall collaborate with IP legal entities, NIIPM, Indian Patent Office and World Patent Office.



Report

"Workshop on Awareness and Importance of Intellectual Property Rights" Organized at MBA Seminar Hall, KLE Tech University, Hubballi on March 07, 2020.

The KLE Tech University with the support and Grants from MSME Dept, Govt. of India has set up an Intellectual Property Facilitation Cell that has taken the task of creating awareness about Intellectual Property Rights amongst faculty and students of the KLE Technological University, students and faculties from other colleges(Law, Pharmacy, Commerce) , entrepreneurs, Business and Industrial Association Representatives . India has become a member of the global patent regime but awareness and expertise on the subject of Intellectual property Rights (IPR) in the academic institutions is still inadequate. To apply for registration of IP, the university scientists and students are required to observe confidentiality in relation to such information though as a university the purpose is to disseminate of information and the building of the research base. Maintenance of a proper balance and fine tuning of academic excellence with academic integrity and protection and exploitation of intellectual property rights is becoming very important for the universities. In the current scenario the aggressive and targeted creation of intellectual property is the need of the hour. Protection of IPR and its commercialization propagates innovative culture, profitability, market leadership and helps creation of wealth for the individual and eventually the Nation. For that IPR awareness is required which is significant for fruitful growth of the Intellectual property rights (IPRs).

In view of above a one day awareness workshop on "Awareness and Importance of Intellectual Property Rights", has been conducted at KLE Tech University on 7th March 2020 (Saturday) by the KLE Tech University – IP Facilitation Cell . The venue was MBA Hall, KLE Tech University campus. Participation was very encouraging from various colleges and departments of KLE Tech University in the workshop. There were -- participants in all including faculties and students from KLE Tech University, research scholars who participated in the workshop on IPR. The program included talks on importance of IPRs and their protection, Patenting procedures, role of innovation and invention in the academia-industry collaborations, trademark and copyright protection, issues of do's and don'ts for a researcher in the context of publishing and patenting.

The resource persons included IPR experts from IP Facilitation Cell of KLE Tech University and Law faculty of Karnataka State Law University**. Smt Archana K.,** Asst Prof Karnataka State Law University, was the speaker of workshop who delivered a Keynote address *on "A Primer on Intellectual property Rights "*, wherein the participants were made aware of meaning of Intellectual Property(IP), Importance of IP, types of IP and protection of IP. This created a buzz among the audience and was very much appreciated by the participants. **Dr. Ravi C Guttal, Head, IP Facilitation Cell,** made a presentation on----------. He explained about the *IP Facilitation cell, objectives and functions of IPFC*. Another speaker was **Dr. Arun Patil,** Asst Prof , KLE Tech University , Hubballi who made the participants aware about patenting procedures . He also shared his personal experiences of filing application for patent.

Finally the discussion was taken to a higher level where implications of IPR to Entrepreneurship & Digital Age were covered.

Madam **Archana K** , Key Speaker for the Event

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Ministry of MSME, Govt. of India

KLE Technological University - Intellectual Property Facilitation Cell Hubballi

jointly organizing

"WORKSHOP ON AWARENESS AND IMPORTANCE OF INTELLECTUAL PROPERTY RIGHTS"

at MBA Seminar Hall, KLE Technological University Campus, Vidyanagar, Hubballi at 10 am on Saturday 7th March 2020

There is no registration fee for workshop participants.

RESOURCE PERSONS

Dr. RAVI C GUTTAL Head IPFC, Director CIPD, KLE Tech University, Hubballi.
Smt. ARCHANA K. Asst. Professor, Karnataka State Law University, Hubballi.
Dr. ARUN Y PATIL Asst. Professor, School of Mech. Engg. KLE Tech University, Hubballi
Adv. SUJATA LAXMESHWAR Legal Counsel, IPFC, KLE Tech University, Hubballi

Participants interested in attending the workshop can confirm their **participation on or before 5th March, 2020 by scanning QR Code**

Dr Ravi Guttal , IPFC Head

Dr Ravi Guttal , IPFC Head – Educating the staff, student and Industry personnel on IPFC .

Madam **Archana K** , Key Speaker for the Event- Explaining about the Trademarks and Copyrights

Asst Prof Arun Patil, sharing his Personal experience of patenting.

KLE TECH.

KLE Technological University

Creating Value
Leveraging Knowledge

Centre for Engineering Education Research

Presents

Photography Exhibition

WELL COME
ALL

Size : 3ft x 6ft - Standee

KLE Technological University
Creating Value
Leveraging Knowledge

Centre for Engineering Education Research
KLE Technological University
B. V. Bhoomaraddi Campus, Vidyanagar, Hubballi (India)

Photography Exhibition for Engineering Exploration faculty members

Date & Time	February 29, 2020, 10.00 am to 12.00 pm
About the workshop	Centre for Engineering Education Research (CEER), KLE Tech is organising a Photography Exhibition for Engineering Exploration faculty members on 29th February 2020, as an outcome of photography workshop conducted earlier. Following were the themes based on elements of photography • Leading lines • Symmetry • Simplicity • Rule of third • Framing
Coordinator	Mr. Nandish Humbi Asst. Professor, Center for Engineering Education Research, KLE Technological University, Hubballi. Phone: +91 9916718568. Email: nandish.humbi@kletech.ac.in
Resource Persons	Prof. Shashidhar Kubsad Professor, Department of Architecture KLE Technological University, Hubballi.
Procedure for registration	There is no registration fee. Guidelines to participate in the Photography Exhibition 1. You are requested to submit high-quality photographs with JPG, JPEG, PNG formats 2. Number of photographs to be shared: Minimum 4 and maximum 8 3. The deadline to submit photographs is 20th February 4. I request you to share your photographs through the link below https://photos.app.goo.gl/aMbQh4rNzHR75pXW8
Venue	Thinkering lab, Centre for Engineering Education(CEER), R H Kulkarni Lecture Hall Complex, KLE Tech.

CENTRE FOR ENGINEERING EDUCATION RESEARCH

Photography Exhibition for Engineering Exploration faculty members

29th February 2020

Description of the Event:

Centre for Engineering Education Research (CEER), KLE Tech organized Photography Exhibition for Engineering Exploration faculty members on 29th February 2020, as an outcome of photography workshop conducted earlier.

Following were the themes based on elements of photography:

- Leading lines
- Symmetry
- Simplicity
- Rule of third
- Framing

14 faculty members and Prof. G H Joshi Director, CEER, KLE Tech participated in the exhibition, and each submitted 4 photographs in a standard format.

Altogether 56 different photographs were exhibited. Prof Shashidhar Kubsad from the Department of Architecture, KLE Tech inaugurated the exhibition and reviewed all the photographs captured by the faculty members of Engineering Exploration Course.

Drive Link of the Photographs:

https://drive.google.com/file/d/10RRRFLHdnc8mbAPvceEmkxoB4Dk93JDM/view?usp=sharing

https://drive.google.com/file/d/1D1K4fH7-MRfI2jL8_hNBE0cMN4SxNG4P/view?usp=sharing

https://drive.google.com/file/d/1iu4pciEQFeu9l2l7p3GvhTXvSTKVDNMd/view?usp=sharing

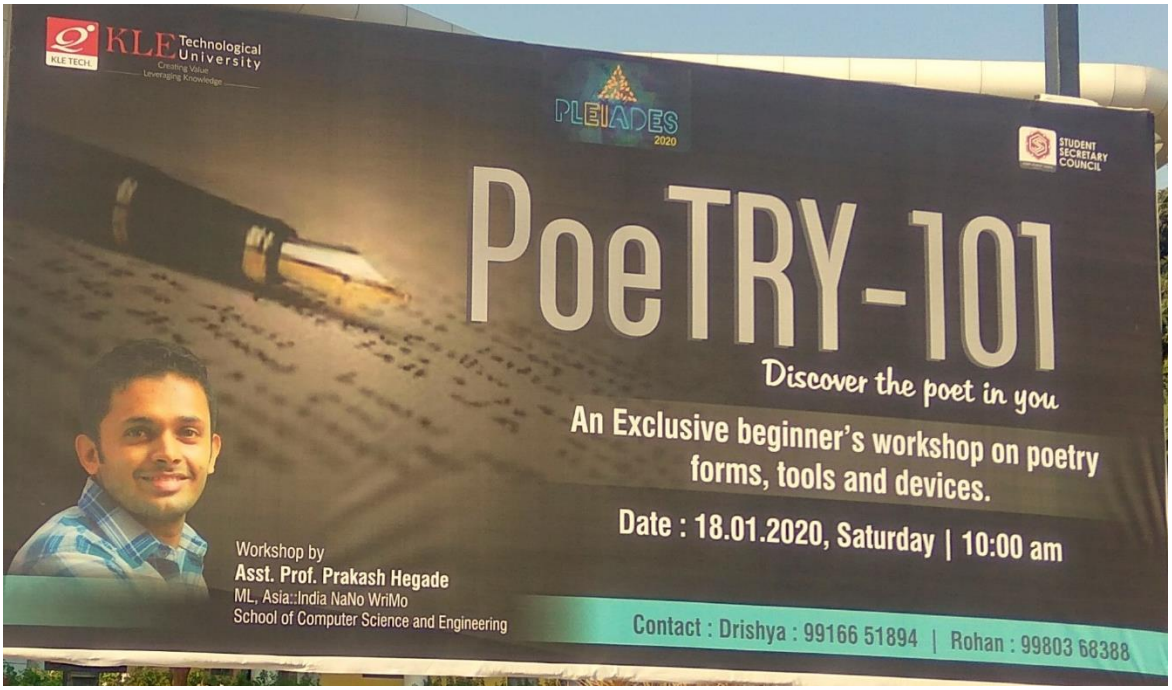
https://drive.google.com/file/d/18mILR2au2wsHYpKk7rnbK3vjVm8aM3aQ/view?usp=sharing

Poetry Workshop Details

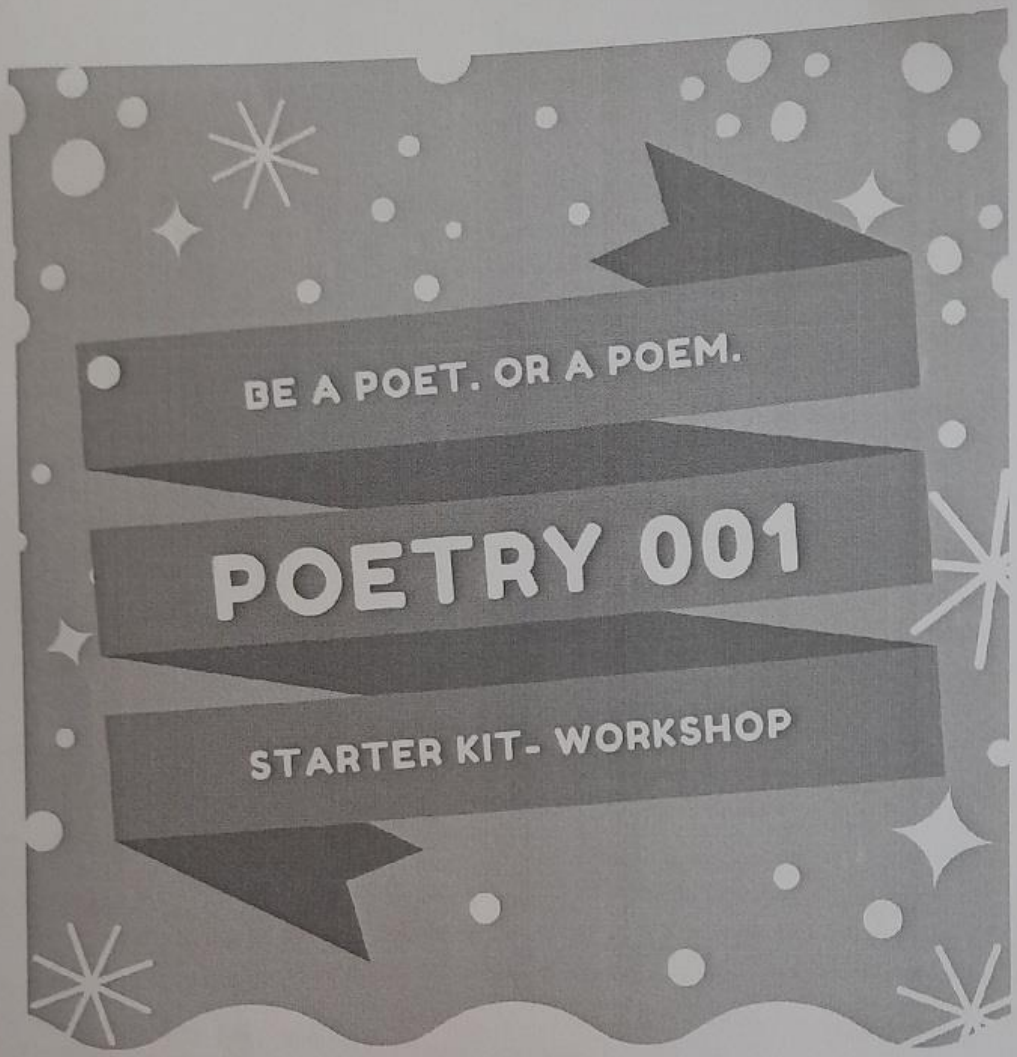
(Covers details of 2 poetry events)

Resource Person: Prakash Hegade, SoCSE

Event Poster:



Photograph:



09 Feb 2019, 12.00 - 1.30 PM
Clite Building

Resource Person:
Prakash Hegade,
Asst. Prof, SoCSE.

Details, Contact:
Vibha, 9945942952

Poetry Forms,
Tools and Devices

Open for 35, First Come First Serve Basis.
Registration link:
https://tinyurl.com/poetry-001

Poetry-001

Workshop Attendance Sheet 09 Feb 2019

Si.No	Name	Email	Sign
1.	Gouri	gourishashishekhar@gmail.com	
2.	Apoorva Hegde	hegdeapoorva123@gmail.com	
3.	Bhavana Devihosur	bdevihosur171099@gmail.com	
4.	Diksha Tiwari	dikshatiwari564@gmail.com	
5.	Jyothi Hiremath	Jyothihiremath99@gmail.com	
6.	Sarah S	sarssbs97@gmail.com	
7.	Fatima U N Naib	nagmanaib@gmail.com	
8.	Junaid parvan Mollah	Junaidmollah11@gmail.com	
9.	K. L. Vijeth	klvijeth@gmail.com	
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12.	Neha R Deshpande	rdnehad9@gmail.com	
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14.	Prathamesh Kulkarni	prathddon@gmail.com	
15.	Rajaram M Joshi	rajaram8799@gmail.com	
16.	Rajesh Satpathy	rajesh.a.s.1997@gmail.com	
17.	Rohith Vaidyanathan	rohithvaidya@gmail.com	
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19.	Shanthika Naik	shanthika.naik26@gmail.com	
20.	Shikshita Juyal	shikshitajuyal23@yahoo.com	
21.	Shivam Ralli	shivamralli167@gmail.com	
22.	Shivam Verma	shivamverma1806@gmail.com	
23.	Shweta Roy	shwetaroy305@gmail.com	
24.	Sindhu Hachadad	sindhuhachadad2000@gmail.com	
25.	Sneha K Bankolli	snehabankolli@gmail.com	
26.	Sougat Paul	sougatpaul06@gmail.com	
27.	Soumya S Jahagirdar	soumyasj22@gmail.com	
28.	Srushti Basavaraddi	sbasavaraddi@gmail.com	
29.	Sudeep Gumaste	sudeepgumaste19@gmail.com	
30.	Tejaswini kale	tejpk99@gmail.com	
31.	V Vineeth Kumar	vellalavineethkumar@gmail.com	
32.	Vaishakh Nargund	vaishakh.nargund1999@gmail.com	
33.	Chaitra Desai	chaitu.desai29@gmail.com	

33.	Vibha Hegde	vibha061099@gmail.com	
34.	Deepti Hegde	deeptibhegde@gmail.com	
35.	Haripriya	haripriyahosur@gmail.com	
36.	Komal Kulkarni	komalrkulkarni@gmail.com	
37.	Vishal	vishalteli84675@gmail.com	
38.	Mayuri M. M	mayurihub@gmail.com	
39.			
40.			
41.			
42.			
43.			
44.			
45.			

PoeTRY – 101
Workshop Handout [18 Jan 2020]

Poem Forms:

Haiku:
Three lines containing five, seven and five syllables.

Limerick:
Line one, two and five rhyme. Lines (usually shorter) three and four rhyme.

Acrostic:
One, you follow the sequence of the alphabet, beginning each verse in your poem with a different one from A to Z. In other, the first (or last) letter of each verse together spells out a message.

Concrete Poetry:
Also known as shape poetry, the idea here is to arrange the words on the screen so that they create a shape or an image.

Ballads:
Telling dramatic and full-size stories.

Prose Poem:
No fixed rules. Whether a reader sees the prose or the poetry in it hinges on a variety of factors beyond the control.

Ode:
Stared out as a fairly fixed form: a three-part stanza written in certain meters. It is any poem celebrating the good qualities of people, objects, places, and personal traits.

Found Poetry:
Made up of words and letters others have created. Find them (hence the name), extract them, and rejoin them into something else: your poem.

Sonnet:
14 lines of verse, usually grouped into four stanzas of 4-4-3-3 lines each and any number of established rhyming schemes

Devices:

Simile:
Like the name suggests, makes a connection or introduces the idea of similarity between two concepts that aren't intrinsically connected, leaving an interesting mental image in its wake

Alliteration:
Use the same consonant multiple times in close proximity.

Internal Rhyme:
Lines with internal rhyming words.

Metaphor:
A metaphor brings together two terms that aren't normally connected, yet make sense once they are.

Enjambment:
When a grammatical sentence stretches from one line of verse to the next.

Anaphora:
Anaphora simply means the repetition of the same word (or cluster of words) at the beginning of multiple lines of verse in the same poem.

Epistrophe:
Epistrophe is the counterpart of Anaphora: the repeated words appear at the end of the lines.

Assonance:
The strategic repetition of vowels in close proximity to each other.

Enumeratio:
Constructing a list, a successive enumeration of multiple elements in the same series.

Chiasmus:
Essentially a reversal, an inverted crossing.

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Leveraging Knowledge

Centre for Engineering Education Research
KLE Technological University
B. V. Bhoomaraddi Campus, Vidyanagar, Hubballi (India)

Photography Workshop for Engineering Exploration faculty members

Date & Time	December 18-19, 2019, 3.00 pm to 5.00 pm
About the workshop	The main aim of the Photography Workshop is to enhance the Photography skills among the Engineering Exploration faculty members. This Workshop focuses on • How to use a mobile phone camera • Understand the techniques and composition concepts behind making great photographs and • Practice photography This Workshop will be conducted under the guidance of Prof Shashidar Kubsad from the Department of Architecture KLE TECH.
Coordinator	Mr. Nandish Humbi Asst. Professor, Center for Engineering Education Research, KLE Technological University, Hubballi. Phone: +91 9916718568. Email: nandish.humbi@kletech.ac.in
Resource Persons	Prof. Shashidar Kubsad Professor, Department of Architecture KLE Technological University, Hubballi.
Procedure for registration	There is no registration fee. To participate in this event, kindly email your Name, Department and Whatsapp contact no to this email ID nandish.humbi@kletech.ac.in
Venue	Thinkering lab, Centre for Engineering Education(CEER), R H Kulkarni Lecture Hall Complex, KLE Tech.

Photography Workshop for Engineering Exploration faculty members

18th and 19th of December 2020

Description of the Event:

The main aim of the Photography Workshop was to enhance the Photography skills among the Engineering Exploration faculty members. This Workshop was about to learn,

- How to use a mobile phone camera
- Understand the techniques and composition concepts behind making great photographs and
- Practice photography

This Workshop was conducted under the guidance of Prof Shashidhar Kubasad from the Department of Architecture KLE TECH.

Photography workshop was organized on 18th and 19th of December 2020 in which 14 faculties of the Engineering Exploration course participated in the event. The workshop was inaugurated by Prof. G H Joshi Director, CEER, KLE TECH.

Drive Link of the Photographs:

https://drive.google.com/file/d/1PuOsWnMt051oh6E2YNDC2QZX3OgURWCU/view?usp=sharing

https://drive.google.com/file/d/1fx3eMX-J6kGZUhNPH1-Ml7lKPasTdMda/view?usp=sharing

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Centre for Engineering Education Research

Attendance Sheet

Photography Workshop for Engineering Exploration faculty members

Date	December 19, 2019
Duration	03.00 pm to 05.00 pm

Sl.No	Name of Faculty	Signature
1	Prof. GopalKrishna Joshi	
2	Mr. Kaushik M	
3	Mr.Ashwin K	
4	Ms. Jyoti G	
5	Ms.Madhu A	
6	Mr. Prashant N	
7	Mr Sandeep K	
8	Mr.Doddabasappa M	
9	Ms Radhika A	
10	Ms. Unnati K	
11	Mr. Nandish H	
12	Mrs. Rajeshwari M	
13	Mr. Raghuraj A	
14	Mr. Sanjeev K	
15	Ms. Padmaja K	

KLE Technological University
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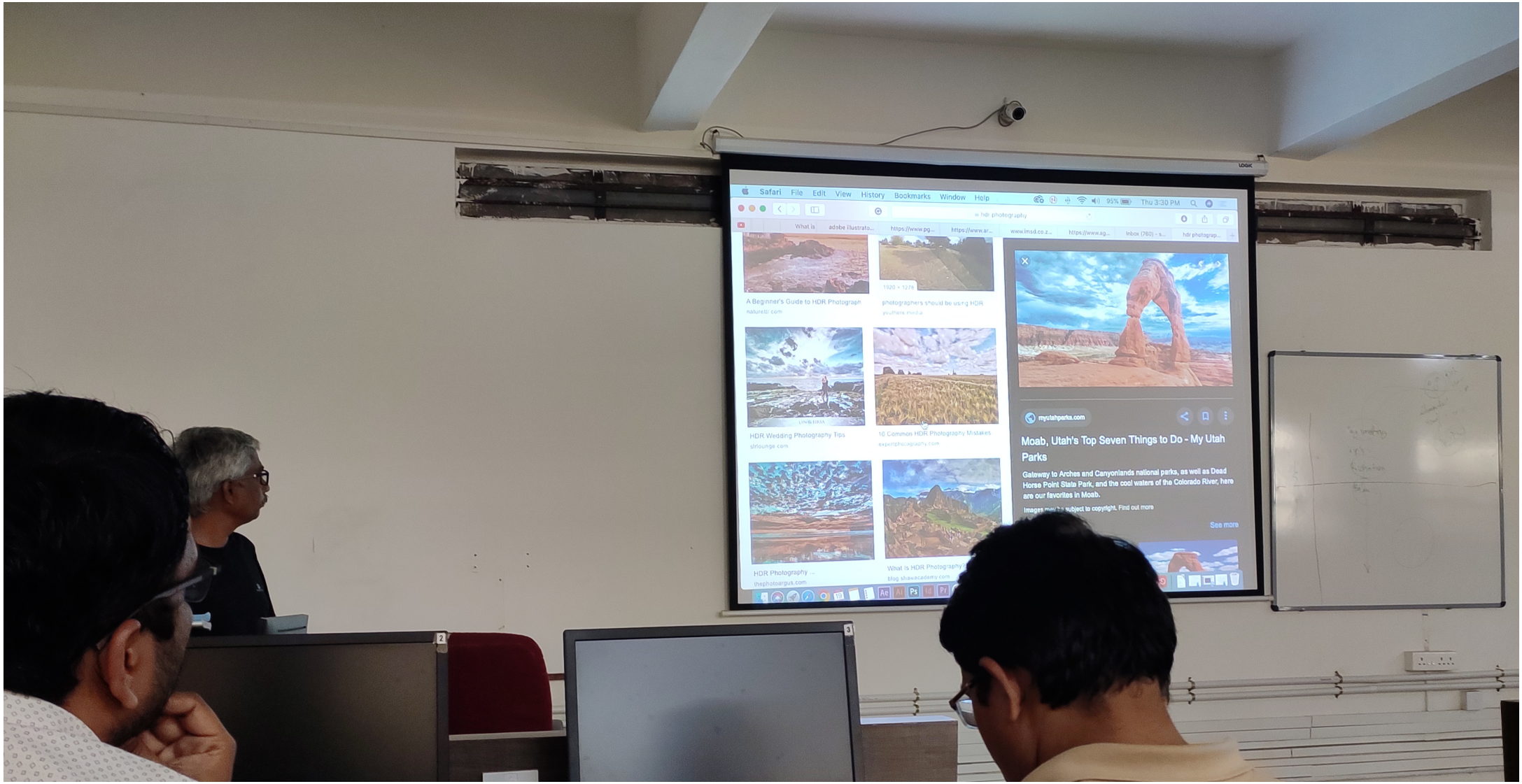
Centre for Engineering Education Research

Attendance Sheet

Photography Workshop for Engineering Exploration faculty members

Date	December 18, 2019
Duration	03.00 pm to 05.00 pm

Sl.No	Name of Faculty	Signature
1	Prof. GopalKrishna Joshi	
2	Mr. Kaushik M	
3	Mr.Ashwin K	
4	Ms. Jyoti G	
5	Ms.Madhu A	
6	Mr. Prashant N	
7	Mr Sandeep K	
8	Mr.Doddabasappa M	
9	Ms Radhika A	
10	Ms. Unnati K	
11	Mr. Nandish H	
12	Mrs. Rajeshwari M	
13	Mr. Raghuraj A	
14	Mr. Sanjeev K	
15	Ms. Padmaja K	


Safari File Edit View History Bookmarks Window Help
Thu 3:30 PM
A Beginner's Guide to HDR Photograph
photographers should be using HDR
HDR Wedding Photography Tips
10 Common HDR Photography Mistakes
HDR Photography
What is HDR Photography
myutahparks.com
Moab, Utah's Top Seven Things to Do - My Utah Parks
Gateway to Arches and Canyonlands national parks, as well as Dead Horse Point State Park, and the cool waters of the Colorado River, here are our favorites in Moab.
See more

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Centre for Engineering Education Research

TEQIP-3
Technical Education Quality Improvement Programme

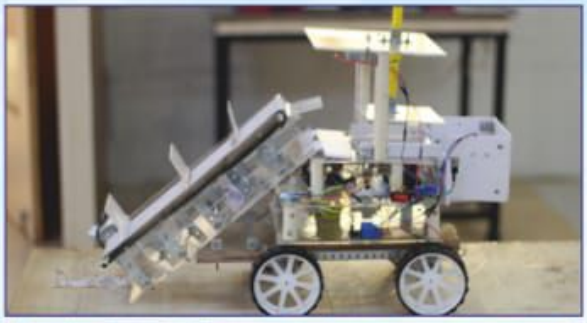
PRAYOG SHARAT

EXHIBITION OF ENGINEERING EXPLORATION COURSE PROJECTS

107 PROJECTS BY 437 FIRST YEAR B.E. STUDENTS

10.00am to 1.30pm on Saturday, December 07th, 2019
Venue : KLE Technological University, Hubballi (India)

JOIN US TO CELEBRATE STUDENTS' SUCCESS




Engineering Exploration @ KLE Tech

"Engineering Exploration" course is a unique innovation born in the educational ecosystem of KLE Tech. This first-year course is co-designed and team-taught by faculty from multiple engineering disciplines. It focuses on problem solving, engineering design, multi-disciplinary skills, ethics and sustainability. It follows PBL pedagogy and students work in teams to solve identified problems. Prayog Sharat is an exhibition conducted in last week of Fall semester and it serves as a platform for peer learning and celebration of students' success.

Contact:
Mr.Vinay Talageri
events.ceer@kletech.ac.in

In Collaboration with

NETRA IESA

Prayog Sharat

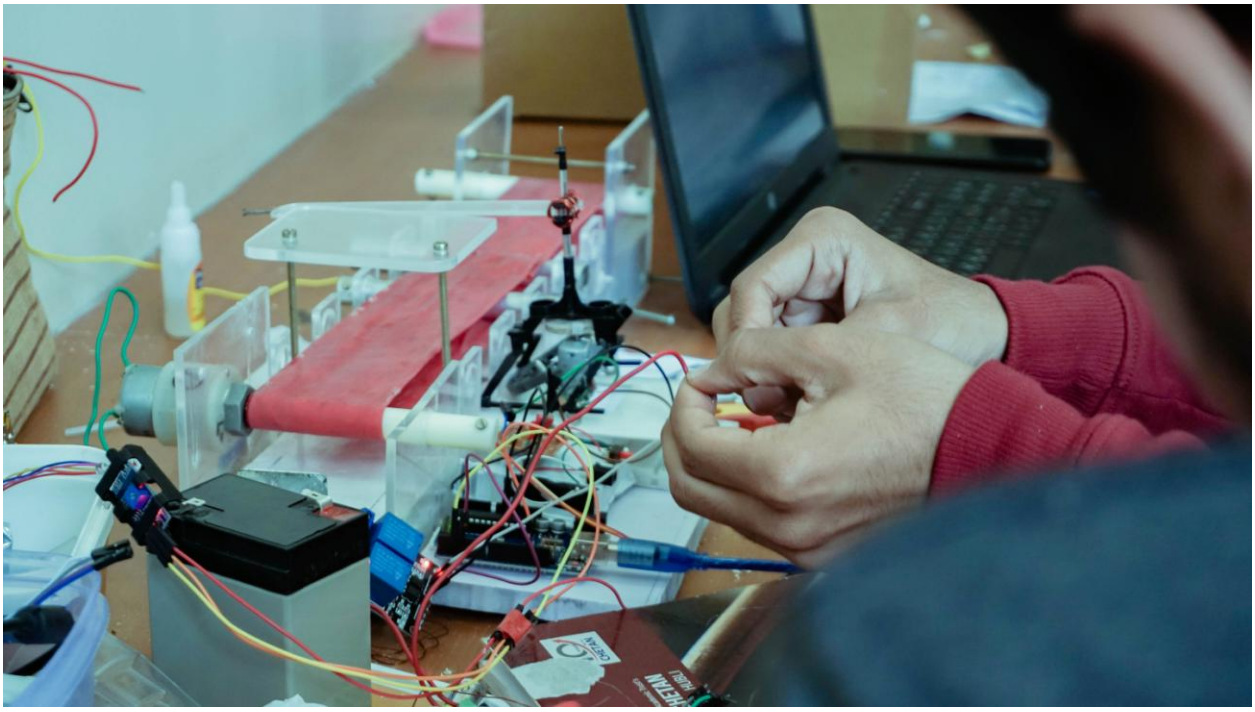
07/12/2019

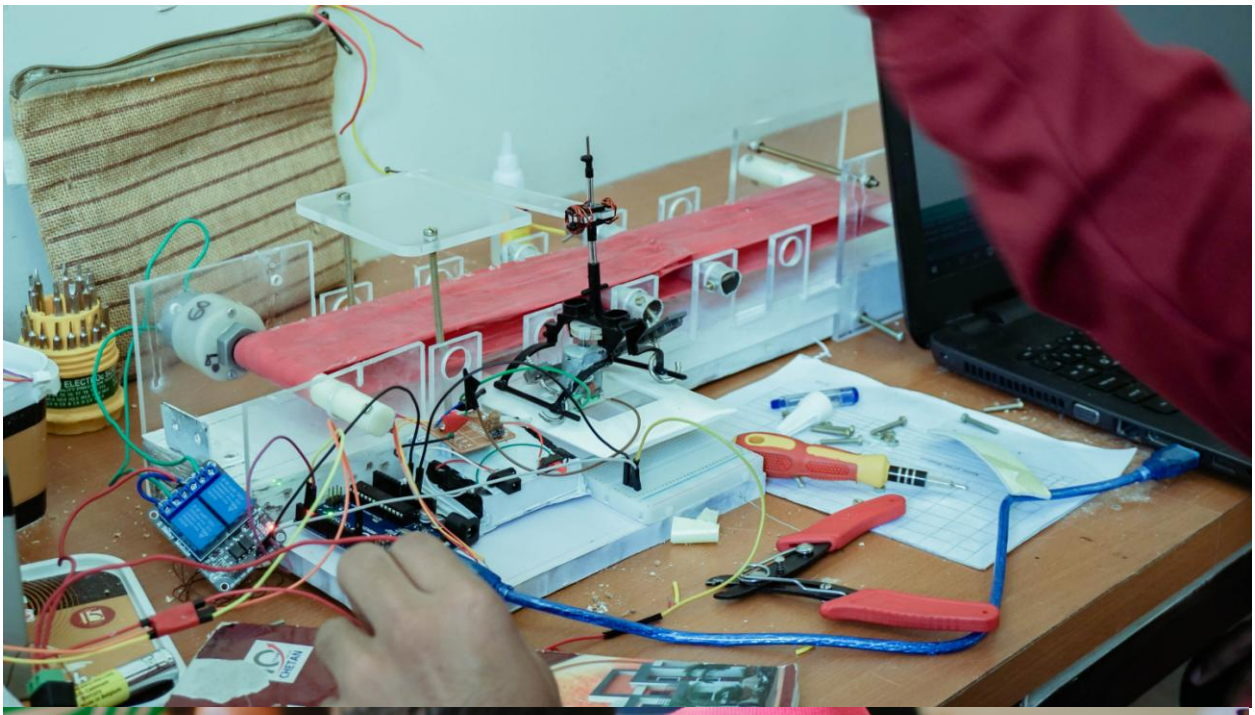
PRAYOG is a course project exhibition for a freshman course, Engineering Exploration. This exhibition is conducted twice a year, as PRAYOG Vasant and PRAYOG Sharat. Every year approximately 250 Course projects are showcased by approximately 1100 students (118 projects in the first semester i.e. PRAYOG- Sharat and Approx. 140 projects in the second semester i.e. PRAYOG- Vasant). The exhibition gave an opportunity for the freshman to showcase their projects to peers, faculty, and delegates from various industries

The objective of the PRAYOG exhibition is to celebrate student success and to promote PEER LEARNING, as students learn from other projects and what they can incorporate from the other projects. During the exhibition, only two students demonstrate the project done by them and the other two would just observe the other projects, for different solutions for the same problems. Hence objective of peer learning is achieved through the exhibition.

Prayog Sharat is an exhibition conducted in the last week of the spring semester. This year the event was conducted on 7th December 2019. 107 projects by 437 first-year students on different need statements were exhibited during the exhibition.

Prof P M Khodke from NPIU, Prof Ashok Shettar, Vice-chancellor, Prof P G Tewari, Dean Academics, and Prof Gopalkrishna Joshi, Director Centre for Engineering Education Research KLE Technological University inaugurated the exhibition followed by the release of the compendium for Prayog Sharat 2019-20. Parents, students from higher semesters, Faculties from different departments, Higher primary school children as a part of Agastya visited the exhibition.





Drive Link of the Photographs:

https://drive.google.com/file/d/1NY8k1HZ4VtwRAcjLAePSONIut1NErSQo/view?usp=sharing

https://drive.google.com/file/d/1-oEaSyt64s10OTVdixxmDMxREjTHE1ym/view?usp=sharing

https://drive.google.com/file/d/1sfyb4LWcjsxCZUwvVij190EibM5ibIyp/view?usp=sharing

https://drive.google.com/file/d/1RKTAUeD5UcH-VBfv8npSoyqEjeFzGf11/view?usp=sharing

https://drive.google.com/file/d/1zbEZrRbxbajedwnJD_AdzG_138HMFsP7/view?usp=sharing

https://drive.google.com/file/d/1_eGJntBO7pPqAqhUm0cmVnw4Aj9Y5IGC/view?usp=sharing

design@globalmediahubli.com

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KLE Technological University, Vidyanagar, Hubballi-580031

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PRAYOG VASANT

Exhibition of
Engineering Exploration
Course Projects

May 04, 2019

Team Engineering Exploration

Mr. Ashwin K, Ms. Sushma V, Mr. Raghuraj A, Mr. Manikanta P, Ms. Jyoti G, Ms. Madhu A, Dr. GopalKrishna Joshi, Dr. Ashok Shetter,
Mr. Sanjeev K, Mr. Kaushik M, Mr. Sandeep K, Ms. Preethi B, Mr. Doddabasappa M, Mr. Vinay T, Mr. Prashant N, Ms. Neha P,
Ms. Deepa B

PRAYOG VASANT
4th May 2019
Exhibition of Engineering Exploration Course Projects

Message from Vice Chancellor

Innovations continually drive the student-centred engineering education ecosystem of KLE Tech. Designing and evolving curriculum that is relevant to the dynamic needs of stakeholders, focusing on active and collaborative learning practices, creating opportunities for students to engage with and explore challenging problems, have made this ecosystem vibrant. Multi-disciplinary collaborations both among the faculty members and the students are leading to exciting learning experiences.

It is in this background that the first year course - " Engineering Exploration " has evolved to be one of the signature courses of KLE Tech. This course is focusing on engineering problem solving, multi-disciplinary skills and team work. The course projects done by students as part of this course get exhibited at the end of the semester. This exhibition provides an opportunity for students to learn from their peers in addition to showcasing their work. This year's exhibition Prayog Vasant is organized on May 04,2019. I understand that a total of 179 projects are being exhibited this time. I take this opportunity to congratulate students and faculty members on this occasion.

May 04, 2019

Dr. Ashok Shettar
Vice Chancellor
KLE Technological University
Hubballi

Engineering Exploration @ KLE Tech

"Engineering Exploration" course is a unique innovation born in the educational ecosystem of KLE Tech. This first-year course is co-designed and team-taught by faculty members from multiple engineering disciplines. It focuses on problem solving, engineering design, multi-disciplinary skills, ethics and sustainability. It follows PBL pedagogy and students work in teams to solve identified problems. Prayog Vasant is an exhibition conducted in last week of spring semester and it serves as a platform for peer learning and celebration of students' success.

Total of 179 projects done by 720 first year BE students are being showcased in this event

PRAYOG VASANT
4th May 2019
Exhibition of Engineering Exploration Course Projects

PROJECTS

Sl. No	Need Statements
1	**Excavation Bot :** ISRO in its next Chandrayaan project is willing to have an autonomous excavation bot which can be helpful for collecting sample (mud, sand or gravels) for scientific study.
2	**Seed Sowing Bot :** University of Agricultural Science has given a project to KLETech University for a seed sowing machine which can be controlled remotely.
3	**Bar Bending Machine :** Bending steel bars for civil construction work is very tedious and time consuming task. There is a need for a machine which can automate the process. (For the sake of convenience assume some stiff wire instead of steel bars)**.**
4	**Rangoli Drawing Machine :** A boy in an upcoming Rangoli competition wants to show his talent of creating Rangoli with a robot.
5	**Robot Musician :** For an upcoming event in KLETECH there is need for robot which can play musical instruments to entertain audience.
6	**Rope Walking Robot :** There is a need of a smart machine which can move on rope and can carry some payload.
7	**Castle Building Robot :** A student team is willing to build a castle building robot for an upcoming project competition. The building blocks could be paper cups, lego blocks, etc.
8	**Game Machine :** A new shopping mall which has opened in Hubballi is interested to have an innovative interactive robotic game in their gaming center. Though claw machine was mentioned by the client as an example, she is not very keen on that game machine.
9	**Beach Cleaning Robot :** As a part of sustainable development initiative, Government of India is very keen on building a machine which will be used for cleaning beaches.
10	**Paper cutting or punching Machine :** A startup industry in KLE Tech park is interested in showcasing a miniature version of their new sheet metal punching / cutting machine. The miniature machine will cut paper instead of sheet metal to show the working of the machine.
11	**Gesture Based Robotics :** Gesture based robotics is slowly gaining its momentum in industrial applications. A science museum is interested in showcasing this new trend.
12	**Braille generator :** Having a refresh able braille generating machine will help blind people to access information easily. The machine is supposed to send data from smart phones.
13	**Automatic Shoe Polishing Machine :** A hotel at Hubballi is interested in putting up an automatic shoe polisher as a part of their service to the customers. Unfortunately the existing solutions are quite costly and are asking you to make ready one at lower price.
14	**Sorting machine :** In a cargo warehouse there is a need of sorting different packages based on shape and color. The warehouse manager is wishing to automate this process.
15	**Useless Machine :** There is a need for an innovative useless machine as an entertainment source in a company workplace. Company management expects the machine to aid for stress relieving of their employees.

Automatic Shoe Polishing Machine

Automatic shoe polishing machines are popularly installed at hotels, malls and other public places. Such machines enable polishing of shoes with wax or liquid polish. The mechatronic prototypes for the shoe polishing machines designed by the students polish leather shoes using wax polish. Different mechanisms like gears and linkage have been used.








PRAYOG VASANT
4th May 2019
Exhibition of Engineering Exploration Course Projects

Rope Walking Bot

Transport of goods from one multistoried building to another is a daunting task. One of the solutions for transporting goods is using ropeways as a means for movement. Based on this idea, the students have designed solutions for – “Rope Walking Bot.” Rope-walking bots carry a payload across a source and destination and detect obstacles in its way. The solutions have been implemented using various mechanisms like gears and crank slider and, among others. Matlab Simulink and MIT Inventor App are used to program the bots and to create the user interface.



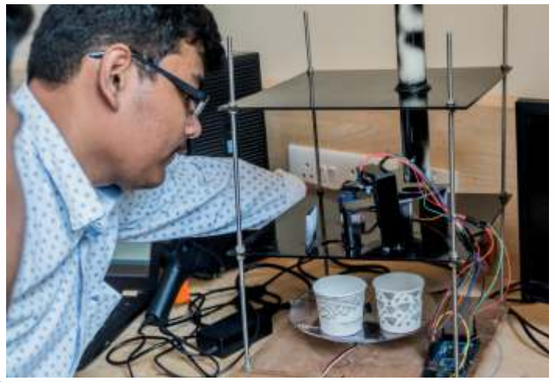




Sorting Machine

Automation of repetitive tasks in industries is adopted to increase productivity, accuracy and eliminating human errors. One such context is the sorting of objects. The solutions sort different objects like buttons, bottle caps, pearls and bangles based on their size and color. Other than the core function of sorting, the solutions also address the dispatching of objects. RGB color sensors are commonly used to sort by color. On completion of color-based sorting, the same objects will also be sorted according to size using different filtering techniques and placed in different containers. Arduino platform and Model-Based Design using MATLAB/Simulink are used to automate the process.

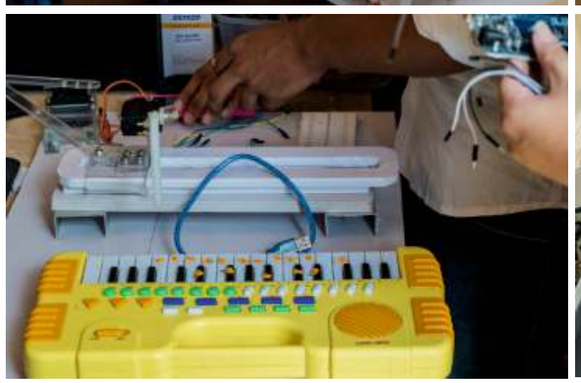


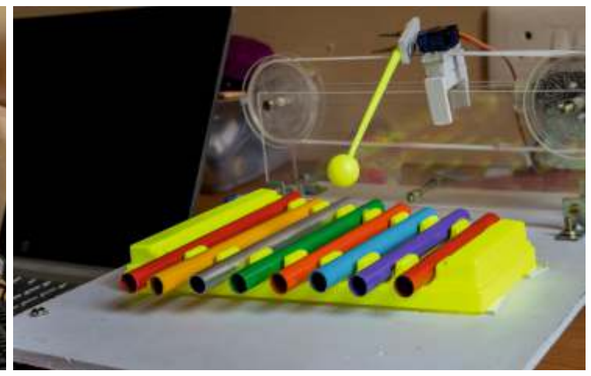



Musical Bot

Musical bots create connection between music and machine. When it comes to music, there are pretty good numbers of instruments are available. In musical bot, we can get diversity with respect to instruments such as piano, guitar, drums player; mechanisms and type of music. Various tunes are generated with the help of programming. Arduino is used as controller to control the various mechanisms to generate the selected tunes.





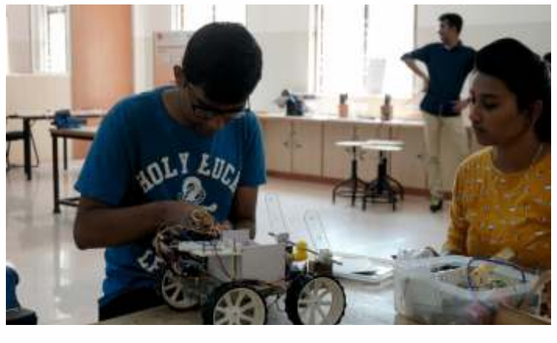



Beach Cleaning Bot

Beaches are often the favorite tourist spots, and there is a necessity of frequent cleaning. Bots designed for the above need demonstrate the functionalities of moving on the wet and dry sand surface and collect the waste materials. A set of robots further demonstrates the functionality of moving on the water surface and collect the floating waste. An App based solution for controlling the bot direction and collecting mechanism is demonstrated.





PRAYOG VASANT
4th May 2019
Exhibition of Engineering Exploration Course Projects

Castle Building Robot

At construction sites, laying of bricks is a repetitive task and has the potential to be automated. The mechatronic prototypes designed for this need statement demonstrate how castles of predefined shapes can be built by using lightweight blocks. Two diverse solutions have emerged in this need statement. A robotic arm is a commonly used to pick the blocks and stack them at designated layout. One of the solutions is a delta robot which uses four arms to pick and place the robot.





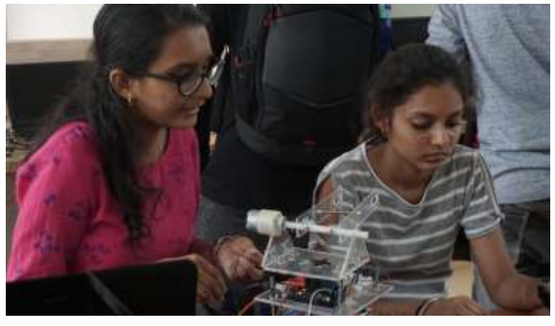

Excavation Bot

ISRO in its next Chandrayana project is willing to have an autonomous excavation bot which can help collect samples (mud, sand or gravel) for scientific study. The ultimate goal of the “Excavation Bot” is to demonstrate fully autonomous execution of excavation tasks in typical construction, such as loading samples or digging a trench. Students have prepared the prototypes with various mechanisms to collect and store the samples. The excavation bot prototypes have been developed on the Arduino platforms and also introduced multiple sensors in it.









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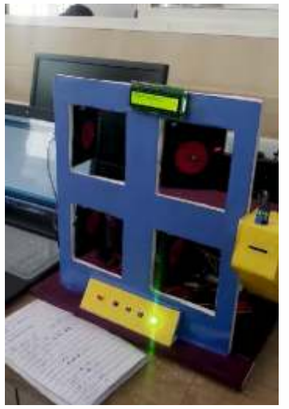
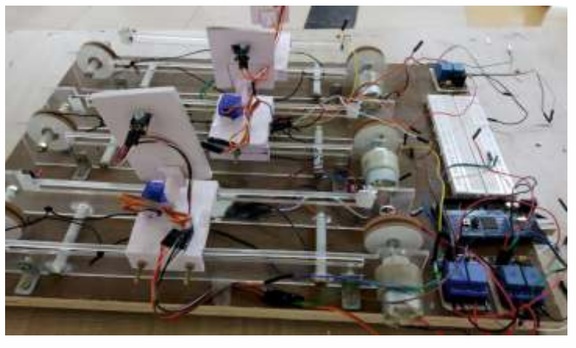
Game Machine

Gaming machines are popular among many age-group of people and are frequently seen in gaming zones in malls. These bots are entertaining in nature. The prototypes of the gaming machines exhibit variations like gesture controlled, pinball machine, hitting the target with a laser, catching the ball, among others. The prototypes have been designed using a different mechanism like rack and pinion, slider and stud movement. For few bots, a mobile App facilitates interaction.





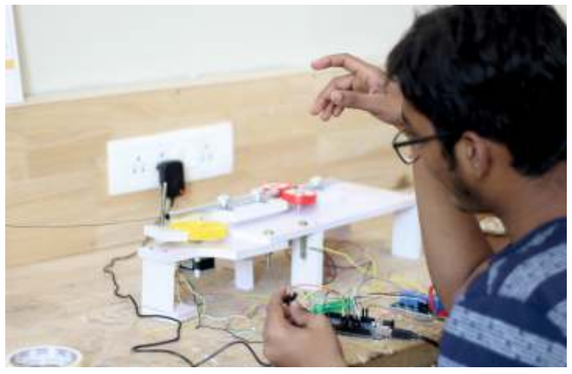


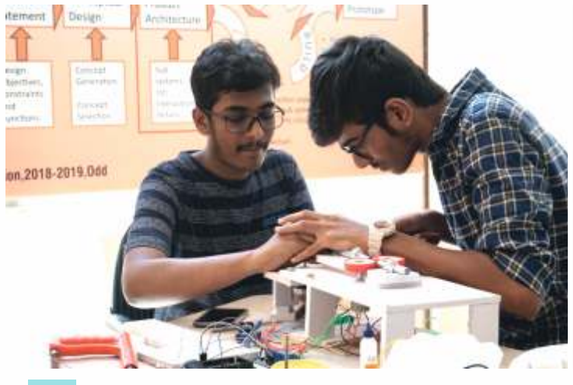



Bar Bending Machine

Bar Bending is a process of making rebars (Reinforcing bars) in different shapes as per the requirement of the particular reinforced concrete work item. Bar bending bots are designed to bend slender rods in various shapes such as 2D square, rectangle, and triangle and in some cases the bots also make 3D shapes like Stars. The bots make use of mechanisms to bend rod using torques provided by stepper motors. Rebar bots functions are controlled using Arduino Mega. The various functions of the bot are feeding of rod, sensing, pausing, bending and dispensing the rod after cutting it.







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Braille Generator

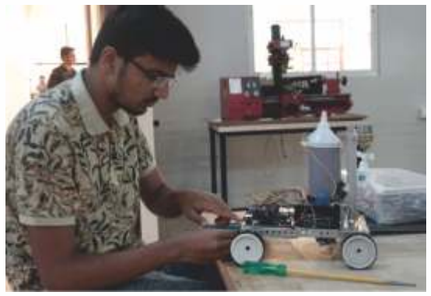
Automatic Braille generator is a device to assist the visually impaired to “read” text messages. The mechatronic prototypes in this need statement are designed to accept a word in English and produce an equivalent character in Braille.





Seed Sowing Bot

Seed sowing machine is a device which helps in the sowing of seeds in the desired position hence assisting the farmers in saving time and money. The solutions designed for sowing seeds sow a different variety of seeds and respective depths. Some solutions also water the area after sowing. The solutions can store, dispense and insert the seed for a given context of the application. The distance between the seeds and the ridges is preprogrammed according to the type of seed. The solutions are mechanically intensive and include mechanisms like rack and pinion. The solutions are implemented on the Arduino platform and some are controlled by a mobile app.







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Exhibition of Engineering Exploration Course Projects

Useless Machine

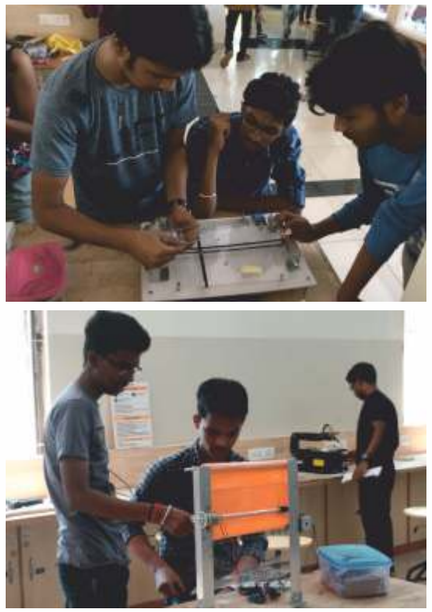
Useless machines can amuse their users. Such machines do not necessarily solve a real-world problem but are entertaining due to their quick interaction with the users. The solutions designed by the students exhibit eight different varieties with the most common being the "turn off-turn-on" kind. The other solutions include reverse twisting of pot knobs, a bubble making machine and paper waste eating machine.






Paper Cutting Machine

Kirigami (the process of paper cutting)has shown to have interesting applications ranging from DIY projects to industrial applications. Prototypes demonstrated for this need performs the functions of auto-feeding and cutting of the papers. Diversity in terms of paper cutting mechanisms and paper feeding mechanisms are reflected.



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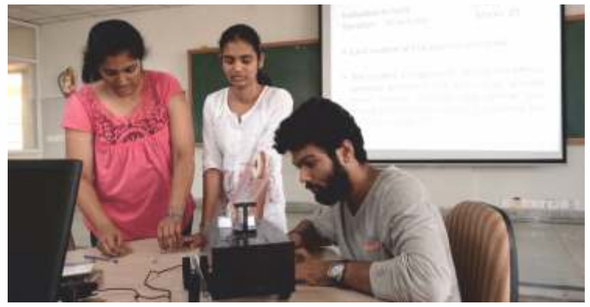
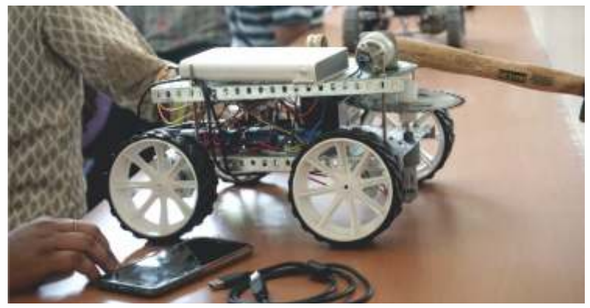
Gesture based Robotics

The application of Robotics is evident in many applications like medical assistance, industries, agriculture automation, and human security systems. In this context, the students have designed different robotic applications that are gesture-controlled. The aim of these projects is to control the functions of the bots using pre-defined gestures which control the bots movements like forward movement, reverse movement, and turning. Additionally, the different teams have introduced other gesture controlled, creative features like pick and place, human assistance, shooting system, robotic war and cutting wire. A hand-wearable device with a suitable sensor and Android mobile phones serves as a source of input gestures to the robots. Considering the feasibility of devices wearable on the hand, most projects have used glove-like or a hand-held device as a source of gestures. RF and Bluetooth technologies are used as a means for transmitting and receiving signals.






Rangoli Drawing

During festivals, vibrant and beautiful Rangoli designs decorate the courtyards in our homes. However, the art is challenging due to its intricate detailing and the need to control the flow of the powder to the desired thickness and length. Rangoli-drawing machines can help draw beautiful Rangoli patterns and thus, adress these challenging tasks. The prototypes designed for this need statement draw lines, patterns, and can also paint on the wall orpaper. Rangoli drawing machine creates the art on the floor or any horizontal surface with Rangoli powder. These machines are built in variations likeCNC driven machine and roller driven machine. They are controlled through a Wi-Fi network or Bluetooth connection. A mobile app has all the controls for this wireless communication. These machines are handy when drawing large and repeated Rangoli designs.



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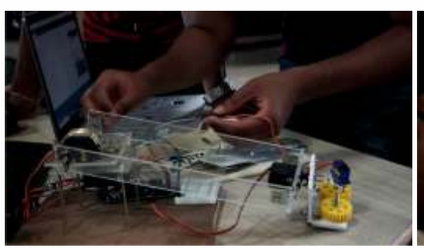


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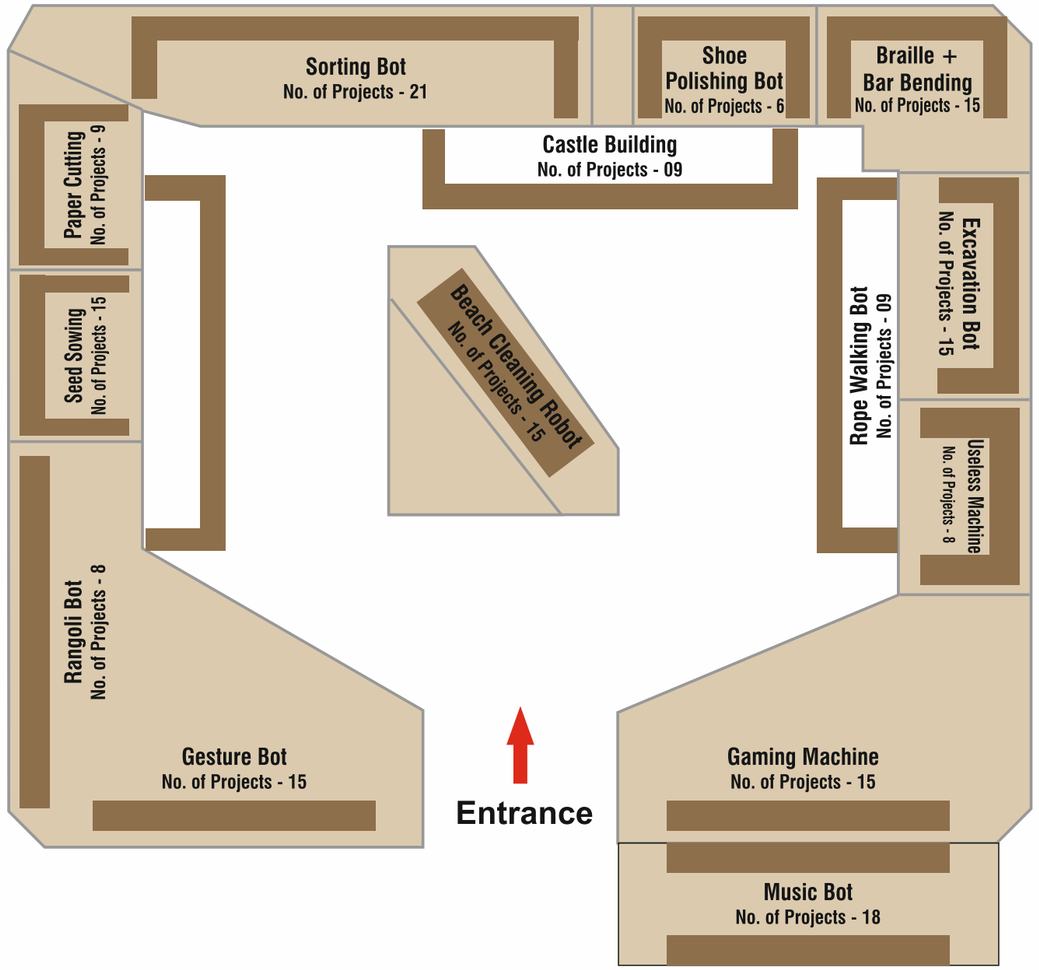
Exhibition Layout



REGIONAL RESEARCH SYMPOSIUM ON PBL

Objective:To develop awareness about PBL and build critical mass of PBL practitioners in the region (Asia – Pacific, particularly India)

Dates: November 22-23,2019.

Registrations:Total number of 208 registrations from 26 institutions from 07 states on India.

Symposium events:

Inauguration: RRSPBL was inaugurated by Dr.Rajive Kumar, Member Secretary, All India Council for Technical Education (AICTE) on November 22,2019. Dr.AnetteKolmos was guest of honour and Prof.AshokShettar presided over the function.

Keynotes:Four keynotes were delivered by eminent from both industry and academia on topics of relevance to engineering education.

Panel Discussion:

A panel discussion on the theme "PBL beyond RRSPBL" was arranged as part of the symposium which explored the possibilities of building a movement of PBL practitioners in India. The panel consisted of representations from industry, academia and government & policy making.

Research Papers:

We received a total of 77 abstracts of which 26 full papers were accepted for presentation and were published in the proceedings of RRSPBL. The proceedings was brought out as a special issue by Journal of Engineering Education Transformations (JEET, Special Issue No.1 November 2019 Volume No.33 eISSN 2394-1707).

Workshops:

A total of 08 workshops were organised on various important PBL themes as part of the symposium. This opportunity was well utilised by the delegates resulting in 93% capacity utilisation.

Figure 1 Inaugural Function

Figure 2 Panel discussion

Education Research

Centre for Engineering Education Research (CEER)

About CEER:

KLE Tech is playing the vital role of creating engineering education system offering opportunities for students to realise their potential and prepare themselves for a professional career. This includes designing industry-relevant curriculum, practising active, collaborative and experiential learning pedagogies and assessment and evaluation. Today KLE Tech is recognised for innovations in this space. Need to learn from these innovations and sustain them resulted in establishing Centre for Engineering Education Research (CEER). CEER was established in 2010 to promote innovations in engineering education, learn from these innovations, collect best practices and institutionalise them.

> Vision: To promote innovation and research in Engineering Education to bring about a qualitative change in students' learning experience.

CEER works with the following objectives:

1. Empower faculty members with the best practices in curriculum design, teaching-learning and assessment through training, workshop and allied activities
2. Encouraging innovation in curriculum design, teaching-learning and assessment
3. Influence faculty mindsets to recognise the importance of research-driven instructional practices
4. Design and offer innovative courses and programs
5. Identify and build strategic global partnerships and collaborations to elevate our research capabilities and those of the wider engineering education community
6. Conduct outreach activities like workshops, trainings and conferences.

The processes and practices towards accomplishing these objectives have made significant contributions to enriching the engineering education ecosystems of the University. The number of engineering education research publications is growing steadily since the last five years. CEER has earned a respectable position among the practitioners of engineering education. A good number of Engineering Colleges in India have taken inspiration and have set up such centres in their respective Institutions taking best practices and courses from.

PhD in Engineering Education

KLE Tech is one of the few Institutions in India offering PhD in Engineering Education. This program is started in 2015-2016 and has been designed with a vision of contributing to leadership development in Engineering Education. Experiences of a few of the leading universities in the world are used in designing the program.

The reconstituted advisory board for the program consists of leaders in engineering education from prestigious universities.

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Prof. P. G Tewari
Dean (Academic Affairs), KLE Tech

Prof. G H Joshi
Director, CEER, KLE Tech

Faculty Conclave 2018

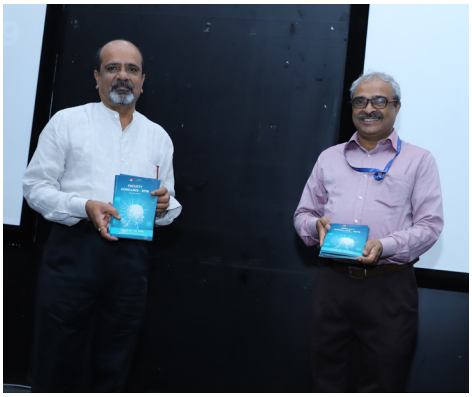
A Two-day Faculty Conclave-2019 was organized by Centre for Engineering Education Research (CEER), KLE Technological University, Hubballi on August 02-03, 2019. Being initiated in 2011, this event is one of the annual highlights.

Faculty Conclave provides a platform to showcase new pedagogical practices and research in the realm of engineering education at KLE Technological University, Hubballi. This year's conclave has a total of 28 papers contributed by 70 faculty members. Number of unique authors is 44. The faculty profiles cut across ages and also departmental boundaries. There are new contributors as well along with regular contributors. The focus of the academic year was PBL and we see contributions through PBL experimentation as well.

Spread over eight sessions, the five distinct themes of the event were:-

1. Curriculum Innovation
2. Outcomes Assessment
3. Experiential Learning
4. Pedagogies in Engineering Education
5. Research Experiences,
6. Entrepreneurship and Industry – Institute Collaboration
7. Post Graduate Program Experiences
8. Technology Enhanced Learning & MOOC Experiences
9. PBL experiences

The faculty of the institute actively participated in the deliberations during the conclave. The event served as a forum for exchange of ideas and practices followed across the various schools and departments of the KLE Technological University.



PRAYOG-An Exhibition of Engineering Exploration Course Projects

"Engineering Exploration" course is a unique innovation born in the educational eco-system of KLE Tech. This first-year course is co-designed and team-taught by faculty from multiple engineering disciplines. It follows PBL pedagogy and students work in teams to solve identified problems.

Prayog is an exhibition conducted in last week of the semester, and it serves as a platform for peer learning and celebration of students' success. The event is conducted twice as Prayog Vasant and Prayog Sharat during the end of the Even and Odd semesters, respectively.

Prayog Vasant was conducted on May 04, 2019 in which approximately 720 students showcase 179 course projects across 15 different need statements. Around 100 guests visited us from various institutes and companies including

1. Mr. KNS Acharya, Vice president, KPIT.
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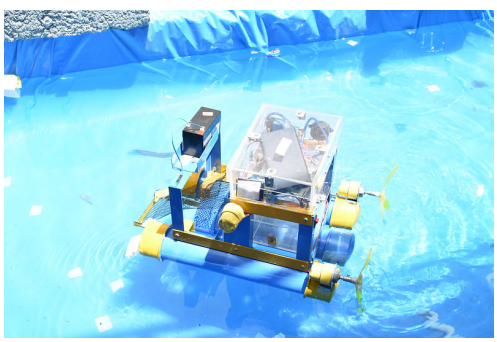

Prayog Sharat

Prayog Sharat was organised on Saturday, December 01, 2018 in which 115 projects done on 12 themes were showcased during the exhibition.

The exhibition was inaugurated by Dr.Ashok Shettar, Vice Chancellor. The following were the prominent dignitaries attending the event:

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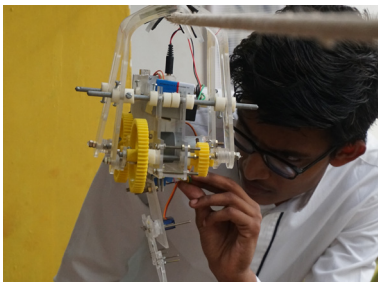


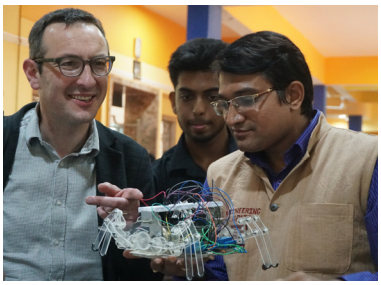

AICTE Examination Reforms workshops

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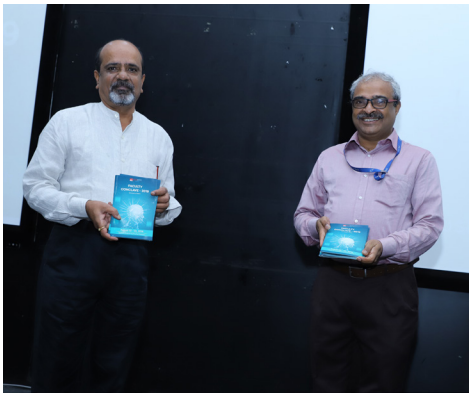

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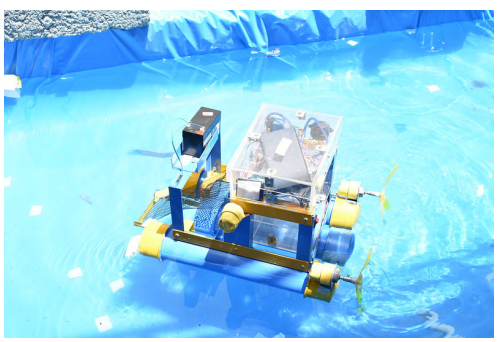

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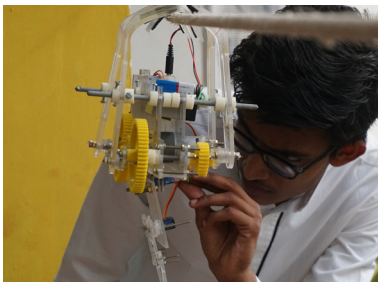


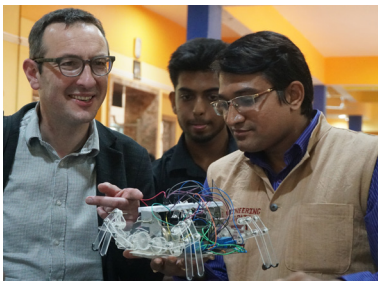

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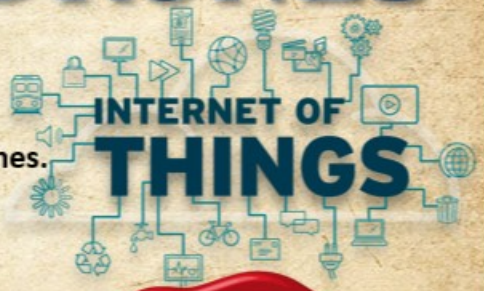
KLE Technological University
Creating Value
Leveraging Knowledge

2 DAY WORKSHOP on IOT AND DRONES

ABOUT THE WORKSHOP



- Introduction to Internet of Things & Drones.
- Robotics & Sensors.
- Hands on Experiments on different development boards.
- Interfacing with various sensors, actuators .
- Projects on raspberry Pi.
- Live Demonstration of commercial Drones.

Open for All! Register Before 10th October

APPLICATIONS

- Smart Home
- Agriculture
- Defence
- Surveillance
- Smart City
- Wearables

In Collaboration with

ROYAL ACADEMY OF ENGINEERING

BENNETT UNIVERSITY
TIMES OF INDIA GROUP

Brunel University London

Co-Ordinated by

ASSOCIATION OF COMPUTER SCIENCE & ENGINNERING STUDENTS

ACSES

SCHEDULE

12th & 13TH OCTOBER 2019

VENUE

School of Computer Science & Engineering

For Registration:

kletech.ac.in KLETech csekletech@gmail.com

Workshosp on IOT and Drones

Sessions	Contents
Day 1	
Session 1	**Introduction to IoT** Applications
Session 2	**Introduction to Arduino** Microcontroller, Development Boards, Types, Installation, IDE, C programming
Session 3	**Introduction to Sensor** Types, Interfacing, Motors, Arduino Interfacing
Session 4	**Hands-on Sessions** LDR, LEDs, Ultrasonic, PIR and Relay
Day 2	
Session 1	**Hands-On** Keypad and motors interfacing
Session 2	**Hands-On** Keypad Controlled Two-wheel Bot
Session 3	**Introduction to Raspberry Pi and their applications** Demonstration of Alexa implementation and other applications.
Session 4	**Introduction to Drones and Demonstration** Application, Uses, Types Exam and Certificate Distribution

Resource Person : Dr. Gaurav Singhal, Bennett University

2-day Workshop on IoT and Drones

12th - 13th Oct 2019

Schedule

Venue: C-lite Second Floor CSC313

Day 1(12th Oct 2019)		
Session	**Timings**	**Content**
1	9.15am-11.15am	**Introduction to IoT** Applications
11.15am-11.30am **Tea Break**		
2	11.30am-1.00pm	**Introduction to Arduino** Microcontroller, Development Boards, Types, Installation, IDE, C programming
1.00pm-2.00pm **Lunch Break**		
3	2.00pm-3.30pm	**Introduction to Sensor** Types, Interfacing, Motors, Arduino Interfacing
3.30pm-3.45pm **Tea Break**		
4	3.45pm-5.00pm	**Hands-on Sessions** LDR, LEDs, Ultrasonic, PIR and Relay
Day 2(13th Oct 2019)		
Session	**Timings**	**Content**
1	9.15am-11.15am	**Hands-On** Keypad and motors interfacing
11.15am-11.30am **Tea Break**		
2	11.30am-1.00pm	**Hands-On** Keypad Controlled Two-wheel Bot
1.00pm-2.00pm **Lunch Break**		
3	2.00pm-3.30pm	**Introduction to Raspberry Pi and their applications** Demonstration of Alexa implementation and other applications.
3.30pm-3.45pm **Tea Break**		
4	3.45pm-5.00pm	**Introduction to Drones and Demonstration** Application, Uses, Types Exam and Certificate Distribution

Timestamp	Name	Email	USN	Semester	Phone Number
10/8/2019 21:20:40	Adarsh parashetti	adarshparashetti@gmail.com	01fe19bme221	1	7666170687
10/9/2019 3:10:13	Adityan Matthew Mehta	adityanmatthewmehta@gmail.com	01fe19bec026	1	9900822744
10/9/2019 8:32:31	Aishwarya	aishwaryakittur1610@gmail.com	01fe19bec087	1	6362337557
10/9/2019 3:10:33	Ajay Kabbur	Ajaykabbur2001@gmail.com	01FE19BEC004	1	9481640257
10/5/2019 23:10:42	Akarsh Hirennavar	akarsh00123@gmail.com	01FE19BAR033	1	9820285427
10/9/2019 5:43:58	Anandgouda N Nagalapur	anandnaglapur@gmail.com	01fe19bme151	1	8217579390
10/9/2019 8:00:06	Avantika Shrivastava	awantikashri@gmail.com	01fe19bcs253	1	7415018994
10/7/2019 2:56:15	Basavaraj gurappanavar	9590694961s@gmail.com	01fe19bme202	1	8147215878
10/10/2019 2:02:54	Bharat Gunhalkar	bharatagunhalkar8@gmail.com	01fe19bec274	1	7259206568
10/10/2019 5:59:19	Bhargav A K [1]	bhargavak246@gmail.com	01FE19BCS133	1	8660674034
10/9/2019 3:10:47	Chakit Lalit bhandari	chakitbhandari93@gmail.com	01fe19bec037	1	9166852878
10/10/2019 5:29:22	Chetangouda M Patil	chetanpatilbyd@gmail.com	01fe19bme199	1	8660490332
10/9/2019 8:33:48	Chintamani	chintamaniangadi7@gmail.com	01FE19BCV076	1	8088115812
10/7/2019 3:37:37	Faraaz reshmi	faraazreshmi33@gmail.com	01FE19BME198	1	8050928657
10/10/2019 23:42:52	Hemanth J	hemanthj03@gmail.com	01fe19bcv088	1	8105017189
10/10/2019 5:57:31	Jason xavier	jasonxjl18@gmail.com	01FE19BEC182	1	7022469307
10/9/2019 3:10:22	Khushi	khushij393@gmail.com	01fe19bec089	1	+917899913652
10/9/2019 6:52:10	Kushal N singi	kushalnsingi002@gmail.com	01fe19bcv041	1	8277091156
10/8/2019 21:20:45	P.Shri Aakash	aakaash2001@gmail.com	01FE19BAR005	1	9686366909
10/10/2019 7:17:16	Prajwal G	prajwal.07g@gmail.com	01fe19bme109	1	8073556117
10/10/2019 2:10:32	Pratham sanshi	prathamsanshi@gmail.com	01fe19bec130	1	7353772263
10/10/2019 7:36:40	Ranganath k madiwalar	madiwalar.ranganath420@gmail.com	01FE19BME194	1	8618220685
10/9/2019 7:14:23	Ribhav Ostwal	ribhav.o@gmail.com	01FE19BVS242	1	9535360757
10/10/2019 4:01:14	Samarth Manwani	Smanwani1@gmail.com	01FE19BCS256	1	+919617017057
10/8/2019 21:04:02	Sankeert	sankeertgandoli2001@gmail.com	01FE19BAR026	1	9482683923
10/5/2019 23:14:15	Sanket Aralgundgi	Kumarsanket.048@gmail.com	01FE19BAR046	1	9632948439
10/9/2019 5:56:27	Shreerama Ashoka Adakoli	ilovetochasesuccess@gmail.com	01FE19BCS206	1	8971768780
10/10/2019 4:01:32	Subhav	subhav6699@gmail.com	01FE19BCS257	1	8755786026
10/10/2019 0:59:33	Sumeet Koneri	konerisumeet3@gmail.com	01FE19BAR036	1	9243240334
10/10/2019 1:00:12	Sumeet Koneri	konerisumeet3@gmail.com	01FE19BAR036	1	9243240334
10/10/2019 4:08:05	Sumeet Koneri	konerisumeet3@gmail.com	01FE19BAR036	1	9243240334
10/9/2019 8:16:23	Tanvi Kotharkar	tanvikotharkar112@gmail.com	01fe19bcv032	1	8861197624
10/10/2019 9:37:10	Tayyab shaikh	tayyabshaikh1213@gmail.com	01fe19bar044	1	8073119143
10/7/2019 2:29:44	Vinayak	vinayaktorgal.india@gmail.com	01fe19bar052	1	8618994967
10/10/2019 2:05:13	Yash Mahale	yashmahale1702@gmail.com	01fe19bec265	1	9741853901
10/10/2019 1:21:14	Calvin antony lobo	calvinlobo.cl@gmail.com	01fe18bec354	2	7760931869

Timestamp	Name	Email	USN	Semester	Phone Number
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10/10/2019 1:01:13	Abhinav Kumar	abhinavkcs11@gmail.com	01FE18BCS008	3	7702605221
10/10/2019 1:11:52	Aditi Hegde	aditishegde27@gmail.com	01fe18bcs015	3	09901851257
10/10/2019 0:57:55	Aditya Girigoudar	adityagirigoudar@gmail.com	01FE18BCS017	3	9742864525
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10/10/2019 7:29:13	Aniketh J	anikethj61@gmail.com	01FE18BEC022	3	9902172585
10/10/2019 9:26:28	Ankit raikar	ankitankit56663@gmail.com	01fe18bec024	3	9742408136
10/4/2019 6:48:11	Anusha Anvekar	anushaanvekar007@gmail.com	01fe18bec029	3	9620248868
10/4/2019 6:48:41	Badduri Sai Sudheer Reddy	cannoneos700d@gmail.com	01fe18bec037	3	9449633601
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10/9/2019 20:40:26	Dheerajsing P Rajaput	dheerajsingdpr@gmail.com	01fe18bme186	3	7411458845
10/10/2019 4:09:51	Gaurav kumar	gaurav07563@gmail.com	01fe18bcs077	3	7892641233
10/10/2019 7:34:16	Jagadish B	jagadishbhilebhavi2701@gmail.com	01fe18bec062	3	9448565765
10/6/2019 7:25:46	Jyotsna	renuriyabestforever126@gmail.com	01fe18bcs084	3	6202533660
10/10/2019 3:20:42	Kartikay Bhardwaj	kbkartikay@gmail.com	01fe18bcs090	3	8076312081
10/10/2019 2:07:29	Kiran jarali	kiranjarali1112@gmail.com	01fe18bcs093	3	9916599042
10/10/2019 4:30:22	M R Sairachan	mrsairachan2000@gmail.com	01fe18bec070	3	9845002075
10/10/2019 3:48:00	Madhura Shanbhag	madhurashanbhag2001@gmail.com	01fe18bcs108	3	7406330470
10/10/2019 4:23:12	Mahesh	maheshpishe393@gmail.com	01fe18bcs109	3	7975872794
10/10/2019 21:58:28	Manisha toshikhani	manishatoshikhani173@gmail.com	01fe18bcv117	3	8762681240
10/10/2019 9:02:18	Mohammed Fatir Ahmed	Mohammadfatir16@gmail.com	01fe18bcs114	3	6363975768
10/10/2019 8:56:44	Mohammed Mudassir	mohammedmudassir200@gmail.com	01fe18bcs116	3	8217049663
10/10/2019 6:33:35	Nagaraj s dhongade	raju.dhongade3@gmail.com	01fe18bme178	3	8197968675
10/10/2019 1:33:50	Naresh Illur	01fe18bcs126@kletech.ac.in	01fe18bcs126	3	7846049703
10/10/2019 9:56:35	Owais Z H	howais@yahoo.com	01fe18bme212	3	7019054718
10/10/2019 7:53:44	Prajwal Mulgund	prajwalmulgund@gmail.com	01fe18bcs146	3	9148861666
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10/4/2019 19:31:12	Shreyas . Potdar	shreyasmp2001@gmail.com	01fe18bcs206	3	9482532845
10/10/2019 1:03:44	Shridatha Hegde	01fe18bec171@kletech.ac.in	01fe18bec171	3	9972895082
10/10/2019 1:06:07	Siddharth Hiremath	siddharthsrh2000@gmail.com	01fe18bec179	3	9448277432

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10/10/2019 1:34:11	Sumant badami	sumant.badami2000@gmail.com	01fe18bcs228	3	9380652446
10/10/2019 7:30:34	Suraj M Dandin	surajdandin09@gmail.com	01FE18BCS233	3	08217703974
10/9/2019 20:42:47	Tejasgouda s	tejasgouda53@gmail.com	01fe18bme173	3	8884191890
10/10/2019 23:13:48	Vijeth angadi	01fe18bme158@kletech.ac.in	01fe18bme158	3	9538721104
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10/10/2019 4:41:39	Vishwachetanagouda	vishwapatil094@gmail.com	01FE18BME176	3	9380074992
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10/10/2019 21:00:24	Vrushabh	vrush.amarashetty@gmail.com	01fe18bcs262	3	9972336948
10/10/2019 8:49:58	Anirudh P	anirudhrajan119@gmail.com	01FE17BCS032	5	9483864579
10/10/2019 6:04:30	Anushree Nilavar	nilavaranushree@gmail.com	01FE17BAR006	5	9845091751
10/10/2019 5:15:37	Bharath Srinivas	smarter.bharath@gmail.com	01FE17BEE016	5	7338070691
10/8/2019 20:54:52	Gaurav Mahajan	mahajan.gaurav04@gmail.com	01FE17BME049	5	+919036921667
10/10/2019 0:55:37	Goutami H	goutamidh19@gmail.com	01fe17bcs077	5	9036418988
10/10/2019 4:31:35	H Sumukh	sumukhh0@gmail.com	01FE17BEE024	5	9032915010
10/6/2019 22:48:28	Haripriya	haripriyah.hosur@gmail.com	01fe17bec061	5	8495051999
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10/9/2019 21:36:31	Manoj hunasimarad	manojsumya@gmail.com	01fe17bee045	5	8123290298
10/9/2019 0:59:27	Nutankumar.A.S	nutankumar360@gmail.com	01FE17BEE057	5	8792287360
10/8/2019 19:47:38	Pramod v dalavi	pramoddalavi20@gmail.com	01FE17BME128	5	9448828864
10/9/2019 5:18:09	Raviraj Bhat	ravirajbhat123@gmail.com	01FE17BME151	5	7899366958
10/10/2019 0:36:36	Renuka	renuka172413@gmail.com	01fm17mca041	5	9986608628
10/10/2019 0:21:15	Shambhavi C	shambhavic16@gmail.com	01fm17mca044	5	+919902960416
10/8/2019 5:51:30	Shrilalita Ganapati I	hegde.hegde5@gmail.com	01FE17BEC177	5	9449099625
10/10/2019 0:21:41	Shweta k	shwetasweety19969@gmail.com	01fm17mca045	5	8151888101
10/7/2019 2:42:31	silky munoth	silky.munoth@gmail.com	01fe17bec183	5	9480465990
10/10/2019 0:57:13	Sudeep Gumaste	sudeepgumaste19@gmail.com	01fe17bcs220	5	07406830904
10/10/2019 0:34:15	Sushma R Hiremath	sushmarhiremath22@gmail.com	01fe17bar057	5	9620113964
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Timestamp	Name	Email	USN	Semester	Phone Number
10/9/2019 22:14:37	Adarsh Raj	adarsh18raj@gmail.com	01FE16BCS009	7	9206543619
10/5/2019 3:41:59	Md Ameen Attar	ameen.attar01@gmail.com	01FE16BEE049	7	8123570853
10/11/2019 3:56:17	Naveen. Pattar	naveen.pattar23@gmail.com	01FE18BEE085	3	9820142349
10/11/2019 7:57:26	Vidhyadhar negalurmath	vidhyadharnegalurmath@gmail.com	01fe19bar054	1st	9108920562
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10/11/2019 21:40:47	Pavan	kalyanpavankumar1043@gmail.com	01fe17bcs128	5	9482061460
10/11/2019 21:41:15	MOHAMMADZAKEE HUNGUND	zakeehungund54@gmail.com	01fe18bcs113	3	7892611302
10/11/2019 21:41:59	Amigh Shetty	hubliamogh@gmail.com	01fe18bcs035	3	8277292460
10/11/2019 21:42:04	MahammadTaiyab Yadwad	mtay3500@gmail.com	01fe18bec071	3rd	8867262927
10/12/2019 1:00:37	sachin	ss4839103@gmail.com	01FE18BAR058	3	09611543703

About the Workshop

Blockchain, is a growing list of records, called blocks, that are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. Hyperledger Fabric is an enterprise-grade permissioned distributed ledger framework for developing solutions and applications. Its modular and versatile design satisfies a broad range of industry use cases. It offers a unique approach to consensus that enables performance at scale while preserving privacy.

Topics

- Private Block Chain
- Hyperledger Fabric
- Chaincode and Smart Contract
- Use cases of Block chain

Resource Persons

Mr. Arnab
Software Engineer
Curl Analytics
Bangalore

Objectives

By the end of workshop participant will be able to:

- Introduce the concepts of Blockchain and its use cases.
- Demonstrate working of Hyperledger Fabric with examples.
- Develop blockchain applications using Hyperledger Fabric.

For Registration:
https://forms.gle/fuXauFAbKD7K7Kwv8

Last Date to Register
04/09/2019

Registration

Name: .....

Designation:.....

Institute: .....

Email: .....

Date: .....

Chief Patron:
Dr. Ashok Shettar
Vice Chancellor
KLE Technological University
Hubballi.

Patrons:
Prof. N.H.Ayachit
Registrar
KLE Technological University
Hubballi.

Dr. P.G.Tewari
Principal
B.V.Bhoomaraddi college of
Engineering & Technology
Hubballi.

Convenors:
Dr. Meena S.M.
Head
SoCSE
KLE Technological University
Hubballi.

Organizing Committee
Prof. Narayan D.G.
Prof. Pooja Shettar

About Instituion

KLE Technological University (KLE Tech) has its roots in one of the premier engineering institution of Karnataka, B. V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. In 2014 the college was recognized as a state private University by Government of Karnataka. The rich heritage of BVB College as one of the best engineering college in Hubli combined with brand equity of KLE Society are the starting points for KLE Technological University to emerge as a University with a national distinction.

About Department

School of Computer Science & Engineering offers graduate, post graduate and doctorate degrees. The Board of Studies (BoS) compromises of experts from academia and industry. The curriculum encompasses core computer science courses and facilitates for experiential learning. School has specialized laboratories in the areas of machine learning, parallel computing, distributed and cloud computing and computer vision.The Department is consistently having a good placement record top hiring companies including Microsoft, Wal-Mart, Juniper, Akamai, SAP, Sony, Informatica, etc.

KLE SOCIETY'S KLE TECHNOLOGICAL UNIVERSITY

KLE TECH

Two-day Workshop on

BLOCKCHAIN TECHNOLOGY

07 to 08 Sept 2019

Blockchain Technology (Hyperledger Fabric)

7th & 8th September 2019

School of Computer Science and Engineering

KLE Technological University

Blockchain Technology (Hyperledger Fabric)

The workshop aims learning more about the various facts of Blockchain. The Blockchain distributed ledger technology has attracted significant attention, with a plethora of platforms such as Ethereum, Ripple, Sawtooth Lake, Hyperledger Fabric, Stellar, Corda, Hashgraph etc. gaining wide adoption. Workshop also provides an hands on experience on implementing Blockchain.

Blockchain Technology (7th and 8th Septemeber 2019)

Day 1 (Saturday-7/9/19)			
Sl.no	**Topic**	**Description**	**Time**
1.	Private Block chain	• Introduction to block chain • Private block chain • Differentiate different popular block chain	**10.30 am to 11.15 am**
2.	Why, how and when to choose a block chain	• What is a suitable use case • On what factor do we choose a block chain • In detail how to choose each component of a block chain - consensus, architecture, security etc. • Discuss and share different options and ongoing research	**11.15 am to 12.30 am**
Lunch Break (12.30 pm to 1.30 pm)			
3.	Detail about Hyperledger Fabric	• Hyperledger umbrella projects • Small introduction to each • In detail different components of fabric • Key features of fabric	**1.30 pm-2.30 pm**
4.	Where we choose hyperledger fabric	• Go with a use case that is suited for fabric • Explain and debate why hyperledger fabric • Discuss, debate and propose an architecture as well.	**2.30 pm to 3.15 pm**
Tea Break (3.15pm to 3.30 pm)			
5.	Setting up a basic network	• Setting up a hello world network • Deploying a hello world contract on that network • Using the product • Discuss the doubts (a little bit of docker)	**3.30 pm to 4.00 pm**

6.	Exploring the network	• Different components of a network • User profile and organization setting • Endorsement policy • Understanding docker topology	**4.00 pm to 5.00 pm**
Tea Break (3.45pm to 4.00 pm)			
7.	•Upgrading the network •Chaincode in detail and smart contract	•Adding org to a channel •Upgrading different network component •Using private data •What is chaincode. •Chaincode and smart contract •Lifecycle of chaincode •Visibility and accessibility of chaincode	**4.00 pm to 5.30 pm**

Resource Person

Attendance Report (Day 1)

KLE Technological University
Earlier known as B. V. B. College of Engineering & Technology

School of Computer Science and Engineering

Blockchain Technology (Hyper ledger Fabric)

Day 1(Attendance)

Date: 7/9/19

Sl.No	Name	Department	Morning Session (10.30am-12.30 pm)	Afternoon Session (1.30pm-3.30pm)	Evening session (3.45pm-5.30pm)
1	Shreyas Hudyad	CSE			
2	Adarsh Kamat	CSE			
3	Aditya Kr Pandey	CSE			
4	V.K. Sakeeth	CSE			
5	Suyog Bhat	CSE			
6	Sanketh P.	CSE			
7.	Rajashekar	CSE			
8	Vinayak M	CSE			
9	Subray B	CSE			
10	Tejaswini Todurkar	CSE			
11	Rakesh Kuredi	CSE			
12	Soumya D.S	CSE			
13	Y.S Supreeth	CSE			
14	Naman Anand	CSE			
15	Koustav Ghosh	CSE			
16	Deepa N Bhat	CSE			
17	Chetan. S.K	CSE			
18	Divya V Shenoy	CSE			
19	Akhila Jadi	CSE			
44	Atlaf Hussain M.	EEE			

KLE Technological University

Earlier known as B. V. B. College of Engineering & Technology

School of Computer Science and Engineering

Blockchain Technology (Hyper ledger Fabric)

Day 1(Attendance)

Date: 7/9/19

SLNo	Name	Department	Morning Session (10.30am-12.30 pm)	Afternoon Session (1.30pm-3.30pm)	Evening session (3.45pm-5.30pm)
20	Apeksha N	CS			
21	Ashoth Raj	CS			
22	Chanda G	CS			
23	Pooja Patil	CS			
24	Geetanjali c m	CS			
25	Amit Mallappa I	CS			
26	Aiswardha P	CS			
27	Abhishek Babi	CS			
28	Arjun Ranjan	CS			
29	Akash Tewari	CS			
30	Amit V.K	MCA			
31	Bhavaraj. K	CS			
32	Pooja-S	CS			
33	Bhagya.S	CS			
34	Manjula.P	CS			
35	Shradha M M	CS			
36	R Shilpa	CS			
37	Prathibha Patil	CS			
38	Radhika K	CSE			
39	Mouna.M.Nanavati	EEE			
40	Priyanka Ramesh Babu	CSE			
41	Rashmi U.B	CSE			
42	Pavitra Havri	CSE			
43	Narayan B.A				

Attendance Report (Day 2)

KLE Technological University
KLETECH
Earlier known as B. V. B. College of Engineering & Technology

School of Computer Science and Engineering

Blockchain Technology (Hyper ledger Fabric)

Day 2(Attendance)

Date:8-9-19

Sl.No	Name	department	Morning Session	Afternoon Session
1	Chandan Jain	CSE		
2	Divya V Shanbhag	CSE		
3	Akhila Joshi	CSE		
4	Abhishek Patil	CSE		
5	Aditya Kumar Panda	CSE		
6	Adarsh Kotaji	CSE		
7	Aastha ranjan	CS		
8	Sanjanka. R.S	CSE		
9	Tejaswini Todurkar	CSE		
10	Subray B	CSE		
11	Vinayak M	CSE		
12	Prathibha Patil	CSE		
13	Radhika K	CSE		
14	Priyanka Ramesh Babu	CSE		
15	Rathna U.B	CSE		
16	Sanketh V Poonia	CSE		
17	Meena. M. Narayani	ECE		
18	Pooja S	CSE		
19	Shivaraj Hangaral	CSE		

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23	Pooja Patil	CS		
24	Geethanjali C M	CS		
25	Anil. M.T	CS		
26	Abhishek. P	CS		
27	Ankush Ranjan	CS		
28	Akash Tonape	CS		
29	Chandan Kumar	CS		
30	Aniruddh P	CS		

Workshop Snapshots

Education Research

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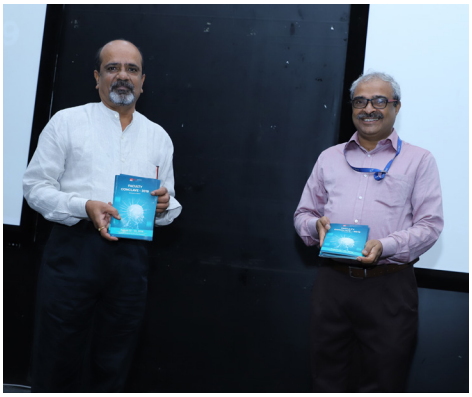

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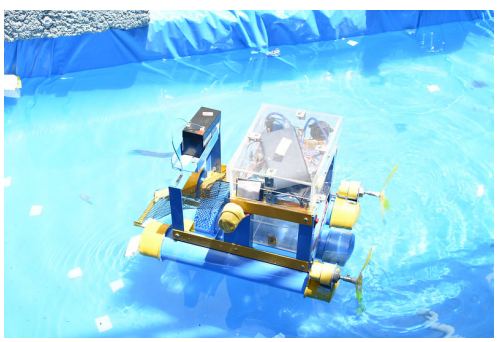

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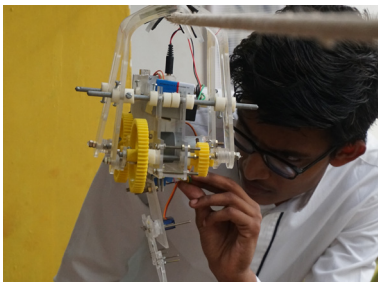


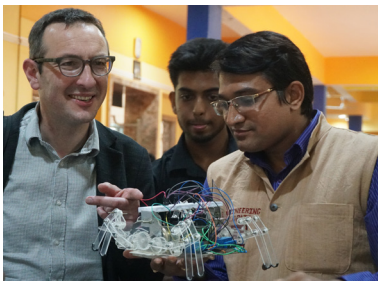

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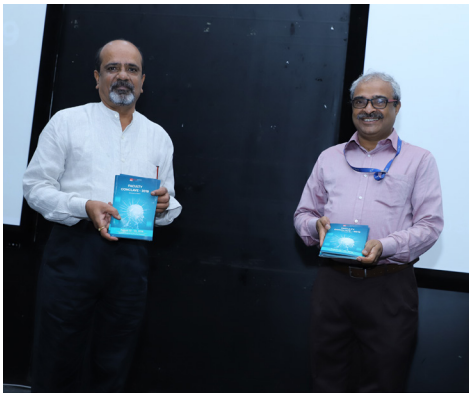

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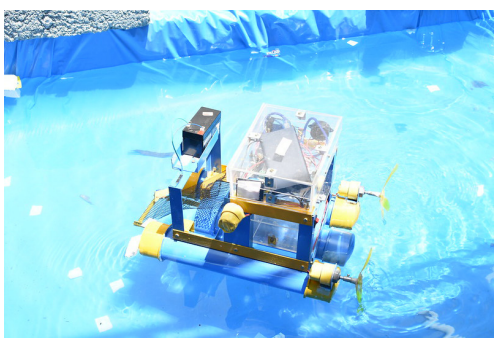

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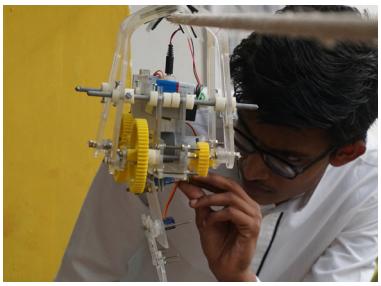


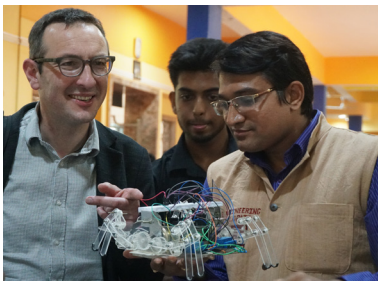

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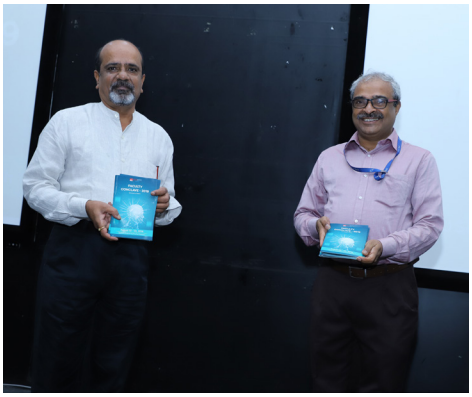

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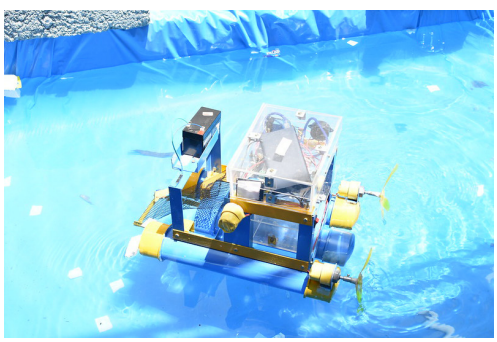

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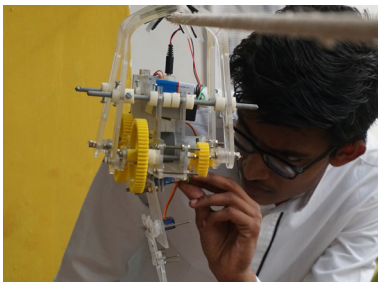


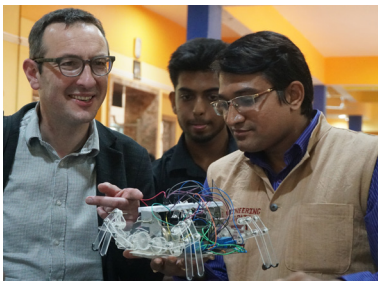

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KLE Technological University
Creating Value
Leveraging Knowledge

School of Computer Science and Engineering

5 Days Summer School on

" Hadoop and Big Data'

A complete hands on course

About the course

Big Data is a set of unstructured and structured data that is complex in nature and is growing exponentially with each passing day. Organizations are facing a major challenge in storing and utilizing this enormous data. This problem spans across the world because of a serious dearth of skilled programmer. Hence, the most talked terms in the present-day internet community are – Big Data and Hadoop.

In this regard School of Computer Science and Engineering is conducting a summer school– Big Data Processing and Hadoop Ecosystem. The school aims at bringing a fundamental understanding of Big Data and how it will impact approaches in solving real world problems. It shall provide an opportunity for students to equip themselves with theoretical, practical and collaboration skills necessary for Big Data Processing using Hadoop. To ensure a high ratio between tutors and students the school will be limited to 30 participants.

Outcomes of the summer school: At the end of the course, participants will be able to:

1. Carryout data analysis using Python.
2. Install and employ Hadoop framework for storage and retrieval of big data.
3. Develop parallel and distributed applications using MapReduce for processing big data.
4. Import and analyze big data using Apache Hive and Pig.
5. Employ HBase on top of hadoop for processing structured and unstructured big data.

Pre-requisites

Knowledge of programming in C/C++ or Java or any other Object Oriented Programming language is preferred.

Schedule

Day	Topics Covered
1	Python Programming for Big Data
2	Introduction to Big Data, Hadoop Installation
3	Big Data and MapReduce Programming
4	Pig and Hive
5	Hbase and Spark

Contact

Mr. Vijay H. Bhajantri
Asst. Professor
School of Computer Science and Engg.
8495905111

Mr. Praveen M. D
Asst. Professor
School of Computer Science and Engg.
9964266154

Ms.Deepa Mulimani
Assistant Professor
Dept. of Master in Computer Application
97398 23536

Maximum 25 students are allowed

Schedule : Starts from 29th July 2019 to 2nd August 2019

Size: 12X18 Inches

About the Workshop

Machine Learning is an interdisciplinary field that focuses on analyzing large amounts of data to discover patterns and is an integral part of the data-driven decision-making process. The workshop introduces fundamental concepts of machine learning and provides hands-on experience of implementing Machine Learning algorithms in the Python programming language for solving real-world problems.

Topics

- Mathematical Foundation
- Supervised Learning
- Unsupervised Learning
- DNN and CNN using TensorFlow
- Advanced Deep Learning topics

Resource Persons

Dr. Meena S. M.
Dr. Nirmala S. R.
Mr. Uday N. Kulkarni
Mr. Sunil V. Gurlahosur

Objectives

By the end of workshop participant will be able to:

- Develop an understanding of the concepts of Machine Learning and Deep Learning.
- Understand the strengths and limitations of various Machine Learning techniques.
- Enables one to select suitable Machine Learning techniques for their application.
- Develop Machine Learning projects using Python and TensorFlow.

Registration

Name: .....

Designation:.....

Institute: .....

Email: .....

Date: .....

Chief Patron:
Dr. Ashok Shettar
Vice-Chancellor
KLE Technological University
Hubballi.

Patrons:
Prof. N. H. Ayachit
Registrar, KLE Tech

Dr. P. G. Tewari
Dean Academics, KLE Tech

Convenors:
Dr. Meena S. M.
Head, SoCSE KLE Tech

Dr. B. B. Kottureshettar
Head, SME KLE Tech

Organizing Committee
Prof. Uday N. Kulkarni
Prof. Sunil V. Gurlahosur
Mr. Shashidhara B. Vyakaranal
Ms. Pratiksha Benagi

About Institution

KLE Technological University (KLE Tech) has its roots in one of the premier engineering institution of Karnataka, B. V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. In 2014 the college was recognized as a state private University by Government of Karnataka. The rich heritage of BVB College as one of the best engineering college in Hubli combined with brand equity of KLE Society are the starting points for KLE Technological University to emerge as a University with a national distinction.

About Department

School of Computer Science & Engineering offers graduate, post graduate and doctorate degrees. The Board of Studies (BoS) compromises of experts from academia and industry. The curriculum encompasses core computer science courses and facilitates for experiential learning. School has specialized laboratories in the areas of machine learning, parallel computing, distributed and cloud computing and computer vision.The Department is consistently having a good placement record top hiring companies including Microsoft, Wal-Mart, Juniper, Akamai, SAP, Sony, Informatica, etc.

KLE TECHNOLOGICAL UNIVERSITY

KLE TECH

Machine Learning Workshop
(June 17 – 29, 2019)

Organized by

School of Computer Science and Engineering
KLE Technological university, Hubballi

In Collaboration with

School of Mechanical Engineering
KLE Technological university, Hubballi

Fundamentals of Machine Learning workshop

June 17 – 29, 2019

School of Computer Science and Engineering

KLE Technological University

Fundamentals of Machine Learning workshop

The workshop introduces fundamental concepts of Machine Learning and provides hands-on experience of implementing Machine Learning algorithms in Python programming language for solving real world problems. The Workshop was conducted by School of Computer Science and Engineering in collaboration with School of Mechanical Engineering.

Machine Learning Workshop (June 17 – 29, 2019)

#	Session	Concepts covered	Resource Person
1.	I	Supervised, Unsupervised Learning	Uday Kulkarni & Sunil G
	II	Lab session: Demo on Classification and clustering	
2.	I	Reinforcement Learning	Uday Kulkarni & Sunil G
	II	Lab session : Demo	
3.	I	Statistics for ML	Nirmala S. R
	II	Lab session Correlation and regression problems.	
4.	I	Data Mining and Analysis	Shankar S
	II	Lab session: Data Pre-processing techniques (Data reduction, data transformation and data Discretization)	
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	II	Lab session: Apriori algorithm.	
6.	I	Classification	Uday Kulkarni & Sunil G
	II	Lab session: ensemble Methods	
7.	I	Classification – Contd...	Uday Kulkarni & Sunil G
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8.	I	Regression – Predictive Modelling, Regularization	Uday Kulkarni & Sunil G
	II	Lab session : Feature Selection ,Metrics for Prediction ,Visualization	
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10.	I	Clustering	Nirmala S R
	II	Lab session: Partitioning methods	
11.	I	Clustering – Contd...	Nirmala SR
	II	Lab session: Hierarchical Methods	
12.	I	Project Implementation	Nirmala SR , Uday Kulkarni & Sunil G
	II		

Attendance Report (Morning Session)

Workshop on Machine Learning								
Session : 9.30am to 1PM								
Sl No	Name of the Faculty	Department	17th June	18th June	19th June	20th June	21st June	22th June
1	Dr. P.P.Revankar	SME				—		
2	B.S.Kakol	SME						
3	Dr. M.B.Gorwar	SME						
4	Ramachadra L	SME						
5	Dr. Rajshekar S.Hosmath	SME						
6	Geerish Chalageri	SME						
7	Vinayak P.Khatawate	SME						
8	Nagaraj Ekbote	SME						
9	Gururaj Fattepur	SME						
10	Anand L	SME						
11	Adarsh Patil	SME						
12	Balachandra Halemani	SME						
13	J.Satish	SME						
14	Madhusudhana H.K.	SME						
15	Shreeshail M.L	SME						
16	Shivaprasad.M.M	SME						
17	Sridhar M.	SME						
18	Rajashekar S.Savadi	SME						
19	Shivangouda Patil	SME						

20	Arun Patil	SME						
21	Santosh Billur	SME						
22	Anandraj D	SME						
23	Shivanand P.P.	SME						
24	Vinay Tigadi	SME						
25	Shrihari KAtti	SME						
26	J.M.Khandal	SME						
27	Sachin Khot	SME						
28	Roopa K.	CIVIL						
29	Khalida M.	CIVIL						
30	Basanagouda P.	CIVIL						
31	Vinayak N.	CIVIL						
32	Fatheali S.	CIVIL						
33	Ms. Jayashree Mallidu	E&E						
34	Ms. Mouna Naravani	E&E						
35	Shachi P	E&E						
36	Ms. Anupama Itagi	E&E						
37	Ms.Sushma V	E&E	Absent		Not registered			
38	Ms. Deeksha Nandur	E&E						
39	Ashwini G K	A&R						
40	Shridhar D	A&R						

41	Shilpa T	A&R							
42	Nagaraj M B	A&R							
43	Sachin Karadgi	A&R	SSK	SSK	SSK	SSK	SSK	SSK	
44	N Vijaykumar	SME							
45	Amit Talli	A&R							
46	Doddabasapp M	A&R							
47	Anupama H.C	E&C							
48	Sahana MB	A&R							
49	C.B.Kolanur	A&R							
50	shivaraj	CIVIL							
51	Vinodkumar Meti	A&R							
52	Vishal P	E&C							
53	Jyoti Bali	A&R							

54 shivaraj CV

55. Jyoti Bali A&R

56. Ratesh P.T A&R

Attendance Report (Afternoon Session)

Workshop on Machine Learning								
Session : 1.30pm to 4.30pm								
Sl No	Name of the Faculty	Department	17th June	18th June	19th June	20th June	21th June	22th June
1	Dr. P.P.Revankar	SME						
2	B.S.Kakol	SME						
3	Dr. M.B.Gorwar	SME						
4	Ramachadra L	SME						
5	Dr. Rajshekar S.Hosmath	SME						
6	Geerish Chalageri	SME						
7	Vinayak P.Khatawate	SME						
8	Nagaraj Ekbote	SME						
9	Gururaj Fattepur	SME						
10	Anand L	SME						
11	Adarsh Patil	SME						
12	Balachandra Halemani	SME						
13	J.Satish	SME						
14	Madhusudhana H.K.	SME						
15	Shreeshail M.L	SME						
16	Shivaprasad.M.M	SME						
17	Sridhar M.	SME						
18	Rajashekar S.Savadi	SME						
19	Shivangouda Patil	SME						

20	Arun Patil	SME							
21	Santosh Billur	SME							
22	Anandraj D	SME							
23	Shivanand P.P.	SME							
24	Vinay Tigadi	SME							
25	Shrihari KAtti	SME							
26	J.M.Khandal	SME							
27	Sachin Khot	SME							
28	Roopa K.	CIVIL							
29	Khalida M.	CIVIL							
30	Basanagouda P.	CIVIL							
31	Vinayak N.	CIVIL							
32	Fatheali S.	CIVIL							
33	Ms. Jayashree Mallidu	E&E							
34	Ms. Mouna Naravani	E&E							
35	Shachi P	E&E							
36	Ms. Anupama Itagi	E&E							
37	Ms.Sushma V	E&E							
38	Ms. Deeksha Nandur	E&E							
39	Ashwini G K	A&R							
40	Shridhar D	A&R							

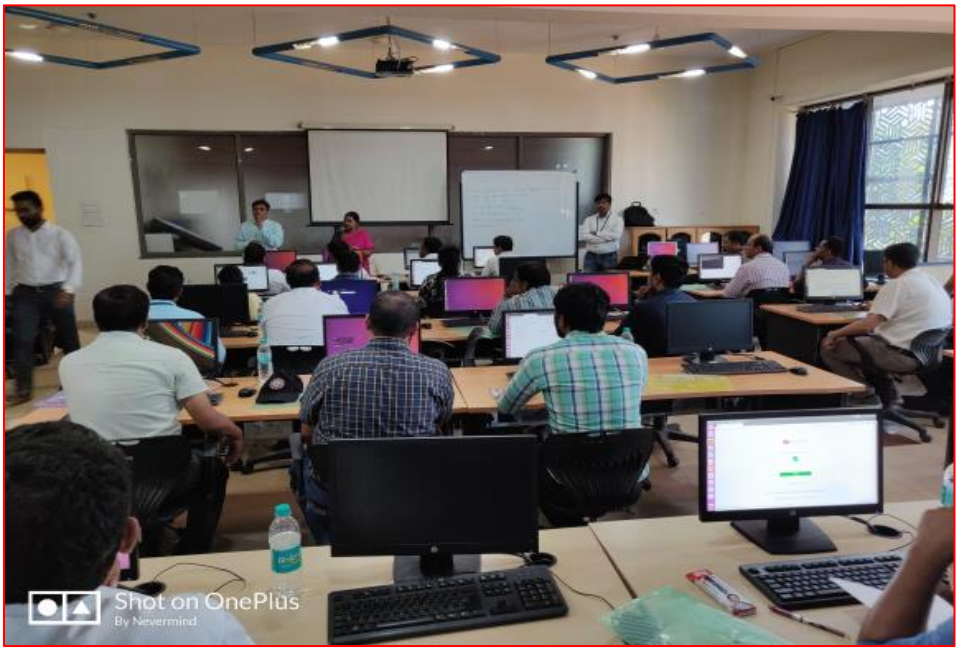
41	Shilpa T	A&R						
42	Nagaraj M B	A&R						
43	Sachin Karadgi	A&R	SSK	SSK	SSK	SSK	SSK	
44	N Vijaykumar	SME						
45	Amit Talli	A&R						
46	Doddabasapp M	A&R						
47	Anupama H.C	E&C						
48	Sahana MB	A&R						
49	C.B.Kolanur	A&R						
50	shivaraj	CIVIL						
51	Vinodkumar Meti	A&R						
52	Vishal P	E&C						
53	Jyoti Bali	A&R						

54. Rakesh T. Tapaskar A&R

55. Jyoti Bali A&R JB

Workshop Snapshots

Dr. Meena S. M. Head, SoCSE and Dr. B. B. Kottursheettar Head, SME addressing participants about importance of Machine Learning in various fields of Engineering.



"A ONE DAY WORKSHOP ON

"QUANTITATIVE AND QUALITATIVE RESEARCH INITIATIVES IN ARCHITECTURE - TIPS AND TRICKS"

It was conducted by Dr.Harimohan Pillai on 25th June 2019 at School of Architecture, KLE Technological University, Hubballi

Professor & Dr.Vinaya Hiremath, Head SOA welcomed the participants to the workshop and gave the introduction to the workshop. Professor Gururaj Joshi introduced the resource person Dr.Harimohan Pillai from Thrissur to the participants. 23 faculty of School of Architecture participated in the workshop.

The workshop emphasized the following aspects

1. Sketching is basic skill of an Architect, writing is an additional skill.
2. Research writing process: selecting a topic, researching making an outline, writing research paper
3. Types of research:
    a. Quantitative
    b. Qualitative
4. Selecting the research venue
5. Surviving the PhD
6. Selecting the guide/Supervisor
7. Completion and writing up
8. Publish your PhD in public domain

This workshop generated awareness and understanding about Research methods in Architecture. Also explore various aspects of relationship between design and the built environment.

Prof & Dr. Vinaya Hiremath, Head SOA addressing the Participants

Prof Gururaj Joshi, introducing Dr. Harimohan Pillai to the Participants

Glimpses during the workshop

Dr. Harimohan during his presentation

Participants of the Workshop with Dr. Harimohan Pillai

About the Workshop

Machine Learning is an interdisciplinary field that focuses on analyzing large amounts of data to discover patterns and is an integral part of the data-driven decision-making process. The workshop introduces fundamental concepts of machine learning and provides hands-on experience of implementing Machine Learning algorithms in the Python programming language for solving real-world problems.

Topics

- Mathematical Foundation
- Supervised Learning
- Unsupervised Learning
- DNN and CNN using TensorFlow
- Advanced Deep Learning topics

Resource Persons

Dr. Meena S. M.
Dr. Nirmala S. R.
Mr. Uday N. Kulkarni
Mr. Sunil V. Gurlahosur

Objectives

By the end of workshop participant will be able to:

- Develop an understanding of the concepts of Machine Learning and Deep Learning.
- Understand the strengths and limitations of various Machine Learning techniques.
- Enables one to select suitable Machine Learning techniques for their application.
- Develop Machine Learning projects using Python and TensorFlow.

Registration

Name: .....

Designation:.....

Institute: .....

Email: .....

Date: .....

Chief Patron:
Dr. Ashok Shettar
Vice-Chancellor
KLE Technological University
Hubballi.

Patrons:
Prof. N. H. Ayachit
Registrar, KLE Tech

Dr. P. G. Tewari
Dean Academics, KLE Tech

Convenors:
Dr. Meena S. M.
Head, SoCSE KLE Tech

Dr. B. B. Kottureshettar
Head, SME KLE Tech

Organizing Committee
Prof. Uday N. Kulkarni
Prof. Sunil V. Gurlahosur
Mr. Shashidhara B. Vyakaranal
Ms. Pratiksha Benagi

About Institution

KLE Technological University (KLE Tech) has its roots in one of the premier engineering institution of Karnataka, B. V. Bhoomaraddi College of Engineering and Technology (BVB), a prestigious engineering college in Hubli. In 2014 the college was recognized as a state private University by Government of Karnataka. The rich heritage of BVB College as one of the best engineering college in Hubli combined with brand equity of KLE Society are the starting points for KLE Technological University to emerge as a University with a national distinction.

About Department

School of Computer Science & Engineering offers graduate, post graduate and doctorate degrees. The Board of Studies (BoS) compromises of experts from academia and industry. The curriculum encompasses core computer science courses and facilitates for experiential learning. School has specialized laboratories in the areas of machine learning, parallel computing, distributed and cloud computing and computer vision.The Department is consistently having a good placement record top hiring companies including Microsoft, Wal-Mart, Juniper, Akamai, SAP, Sony, Informatica, etc.

KLE TECHNOLOGICAL UNIVERSITY

KLE TECH

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52	Vishal P	E&C							
53	Jyoti Bali	A&R							

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55. Jyoti Bali A&R

56. Ratesh P.T A&R

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44	N Vijaykumar	SME						
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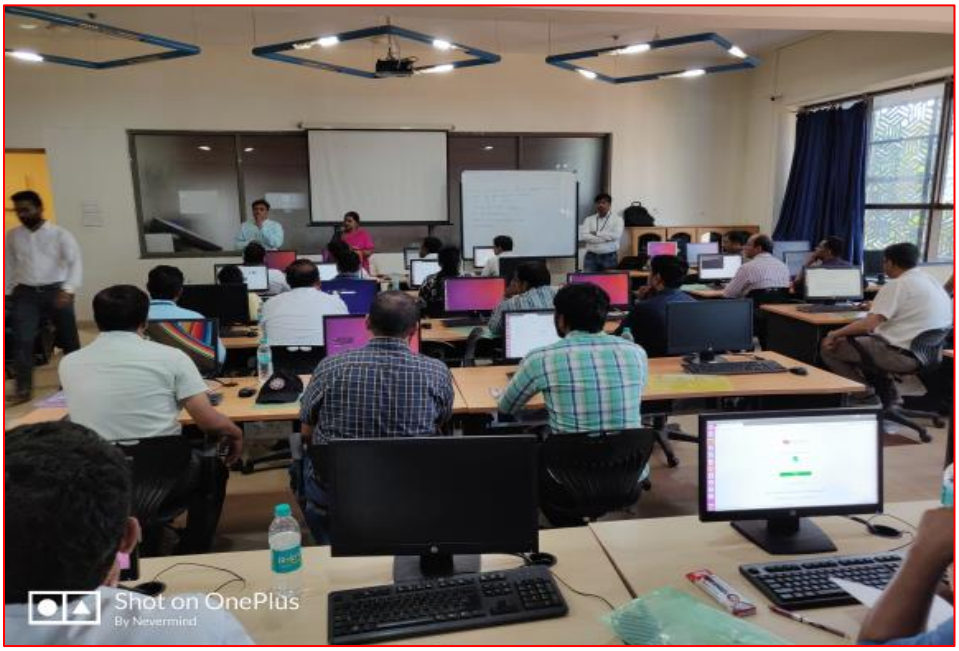
52	Vishal P	E&C						
53	Jyoti Bali	A&R						

54. Rakesh T. Tapaskar A&R

55. Jyoti Bali A&R JB

Workshop Snapshots

Dr. Meena S. M. Head, SoCSE and Dr. B. B. Kottursheettar Head, SME addressing participants about importance of Machine Learning in various fields of Engineering.



Report on Python Workshop conducted from 10th-15th June 2019

Resource Persons:

1. Mr Praveenraj Pattar
2. Mr K.M.M. Rajashekharaih
3. Mr Mallikarjun Akki

Biography of the resource persons:

Mr Praveenraj Pattar is Assistant Professor in School of Computer Science and Engineering at KLE Technological University from 2015. He graduated in Bachelors and Masters from UVCE, Bangalore and BMS College of Engineering, Bangalore respectively. His is ex-Intel employee. His area of interest in research is Machine Learning, AR&VR.

Mr K.M.M. Rajashekharaih is Associate Professor in School of Computer Science and Engineering Department at KLE Technological University from 2012. He graduated in Bachelors and Masters from Vijayanagar Engineering College, Bellary and JNNCE Shivamogga respectively. His area of interest is Object Oriented Programming (OOPs) and text mining.

Mr Mallikarjun Akki is Assistant Professor in School of Computer Science and Engineering Department at KLE Technological University from 2014. He graduated in Bachelors and Masters from SDMCET, Dharwad and Dept. of Studies, Visvesvaraya Technological University, Belgavi respectively. His was research intern at Legends Consulting Private Ltd., Dharwad. His area of interest in research is Bio Avionics, Computer Vision.

The workshop details is as follows:

Sr. No	Topic	Timings	Concepts covered	Resource Person/s
1.	Python basics	09.30 AM to 1.00 PM 10th June	Environment Setup, Basic Syntax, variable Types, Basic Operators, Date & Time.	Praveenraj Pattar
		01.45 PM to 4.30 PM 10th June	Numbers, Strings, Lists.	Praveenraj Pattar
2.	Data structures and Conditi	09.30 AM to 1.00 PM 11th June	Tuples, Dictionary.	Praveenraj Pattar

	onal flow	01.45 PM to 4.30 PM 11th June	Decision Making, Loops, Functions, Modules.	Praveenraj Pattar
3.	File operations,	09.30 AM to 1.00 PM 12th June	Regular Expressions, Files I/O (Reading from different file types).	Praveenraj Pattar
	Object oriented programming	01.45 PM to 4.30 PM 12th June	Class, Class variable, Data member, Constructors, Function overloading, Instance variable.	K. M. M. Rajashekharaih
4.	Object oriented programming	09.30 AM to 1.00 PM 13th June	Inheritance, Instance, Instantiation, Method, Object, Operator overloading.	K. M. M. Rajashekharaih
		01.45 PM to 4.30 PM 13th June	Exceptions handling.	K. M. M. Rajashekharaih
5.	Numpy and Scipy	09.30 AM to 1.00 PM 14th June	Ndarray object, Data Types, Array Attributes, Array Creation Routines, Array from Existing Data, Array from Numerical Ranges: Indexing & Slicing, Advanced Indexing, Broadcasting, Iterating Over Array.	Mallikarjun Akki
		01.45 PM to 4.30 PM 14th June	Array Manipulation, Binary Operators, String Functions, Mathematical Functions, Arithmetic Operations, Statistical Functions.	Mallikarjun Akki
6.	Numpy and Scipy	09.30 AM to 1.00 PM 15th June	Scipy: Basic Functionality, Cluster, Constants.	Mallikarjun Akki
		01.45 PM to 4.30 PM 15th June	Database Operations: Create, Retrieve, Update and Delete.	Mallikarjun Akki

Attendance list is as below:

Workshop on Python				
10th - 15th June 2019				
Sl No	Name of the Faculty	Department	email id	Signature
1	Mr. Roshankumar Arya	Mathematics	roshan@kletech.ac.in	
2	Dr. S B Chaugala	Mathematics	sbgudimani@kletech.ac.in	
3	Dr. Bharati Shettar	Mathematics	bharati_shettar@kletech.ac.in	
4	Mrs. N S kabbur	Mathematics	nskabbur25@kletech.ac.in	
5	Miss. Anusha Shenoy	Mathematics	anusha.shenoy@kletech.ac.in	
6	Dr. P.P.Revankar	SME	pp_revankar@kletech.ac.in	
7	B.S.Kakol	SME	bskakol@kletech.ac.in	
8	Dr. M.B.Gorwar	SME	mb_gorwar@kletech.ac.in	
9	Ramachadra L	SME	ramachandra@kletech.ac.in	
10	Dr. Rajshekar S.Hosmath	SME	rshosmath@kletech.ac.in	
11	Geerish Chalageri	SME	gireesha@kletech.ac.in	
12	Vinayak P.Khatawate	SME	vinayak@kletech.ac.in	
13	Nagaraj Ekbote	SME	nagaraj_ekbote@kletech.ac.in	
14	Gururaj Fattepur	SME	gururaj_f@kletech.ac.in	
15	Anand L	SME	anandl@kletech.ac.in	
16	Adarsh Patil	SME	adarsh@kletech.ac.in	
17	Balachandra Halemani	SME	balachandra@kletech.ac.in	
18	J.Satish	SME	jsatish@kletech.ac.in	
19	Madhusudhana H.K.	SME	madhusudhana@kletech.ac.in	
20	Shreeshail M.L	SME	shreeshail_m@kletech.ac.in	
21	Shivaprasad.M.M	SME	shivaprasad_m@kletech.ac.in	
22	Sridhar M.	SME	sridhar_m@kletech.ac.in	
23	Rajashekar S.Savadi	SME	rajshekhar_s@kletech.ac.in	
24	Shivangouda Patil	SME	shivanagouda_p@kletech.ac.in	
25	Arun Patil	SME	arun_p@kletech.ac.in	

26	Santosh Billur	SME	santosh@kletech.ac.in	
27	Anandraj D	SME	anandraj@kletech.ac.in	
28	Shivanand P.P.	SME	shivanand@kletech.ac.in	10/06/2019
29	Vinay Tigadi	SME	vinay_t@kletech.ac.in	
30	Shrihari KAtti	SME	Shrihari@bvb.edu	
31	J.M.Khandal	SME	jmkhandal@kletech.ac.in	
32	Sachin Khot	SME	sachin.khot@kletech.ac.in	
33	Roopa K.	CIVIL	roopa.kuri@kletech.ac.in	
34	Khalida M.	CIVIL	basanagouda.patil@bvb.edu	10/06/19
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Workshop on Python

10th - 15th June 2019

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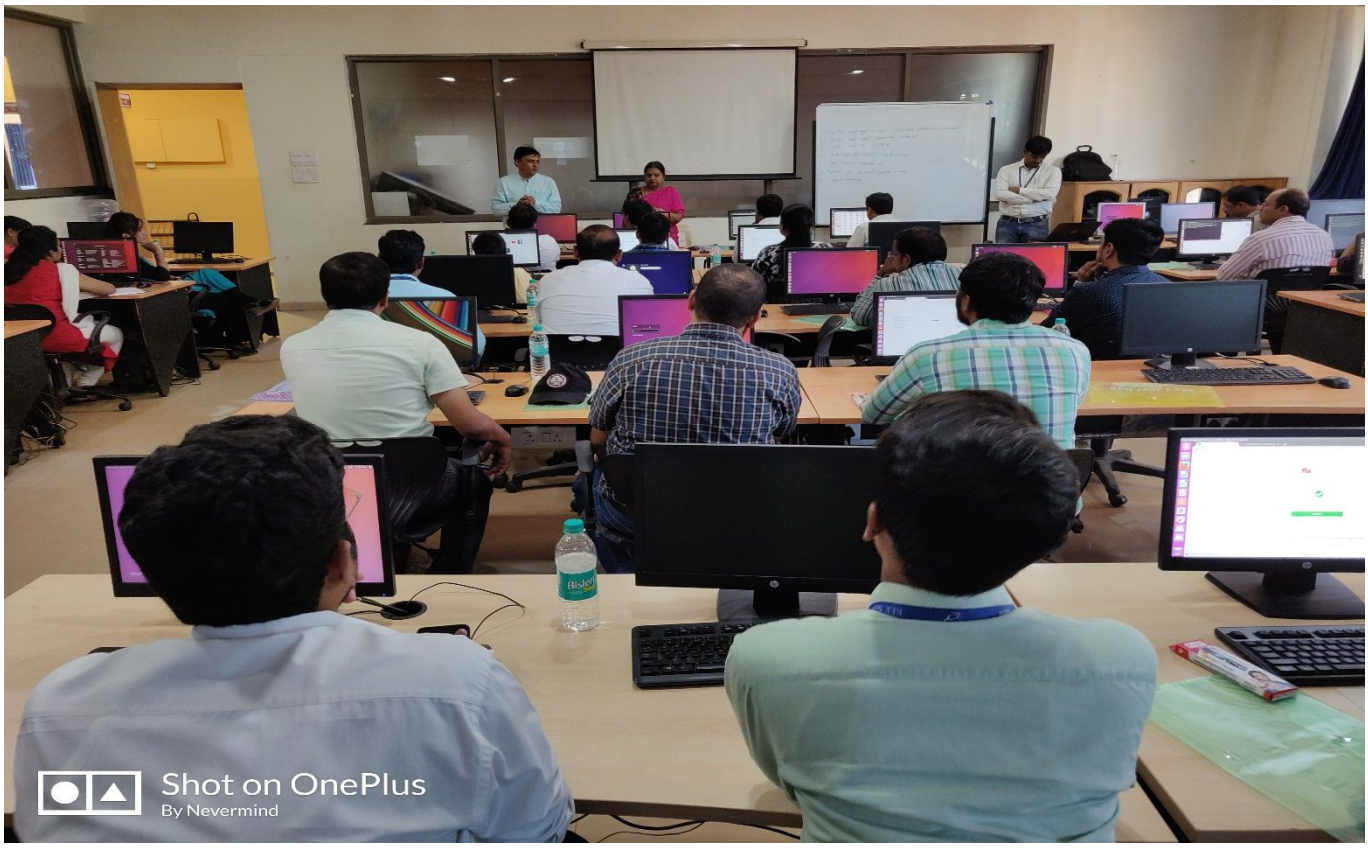
Workshop Snapshots



Computational Thinking
Workshop Details

One Day Workshop on

"COMPUTATIONAL THINKING"

03 June 2019, 10.00am to 5.00pm
C-lite Building, KLE TU, Hubballi.

More info and registration form at:

https://tinyurl.com/knit-ct-2019

A KNIT ARENA PRESENTATION

www.knitarena.com

Photographs:

Student Registration List:

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Sample Materials:

CT - Representation System

					1	3	1	
					4	1		
					1	4		
					0	1	3	1
					0	1	3	1
					1	4		

CT – Coffee House