

SEED

Student Ecosystem for Engineered Data

KLE Technological University, BVB Campus, Vidyanagar, Hubballi – 580031, Karnataka, INDIA
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Vision

Our vision is to be pioneers in data generation and capture capabilities by providing innovative environment, outstanding research experience, global recognition, and research excellence with an impact on industry and society.

Objectives

- Enable data capture in varying conditions by setting up synthetic environment.
- Design generative algorithms for synthetic data generation, and extending towards its generative variants.
- Design/explore tools for annotation of generated and captured data.
- Design/explore innovative tools towards automation of data curation and processing.
- Model means and mechanisms for data archival and organization.
- Design platform/pipeline for data visualization and presentation.

KLETech - SRIB Collaborative Initiatives

The initiative for collaboration with Samsung Research Institute Bangalore (SRIB) was taken under the KLE Technological University's (KLE Tech) Industry Collaborative Initiatives towards curriculum design & delivery, collaborative projects for experiential learning, and capacity building of students & faculty.

The objective of this collaboration is to strengthen the curriculum thread in undergraduate programs by involving the experts from SRIB in Board of Studies (BoS) and Introduction of state of art courses for UG and PG programs, where the industry experts are a part of designing course content, delivery, and evaluation. SRIB team is also actively involved in course conduction through co-delivery and conducting reviews towards evaluation. The SRIB team is in continuous discussions with faculty to arrive at the holistic curriculum thread.

The SRIB team contributes towards capacity building of students by conducting training programs, workshops, expert tech talks. Towards enhancing software competency SRIB team contributes in conducting Codethons and Hackathons. SRIB also provides student internships to students of KLE Tech under the initiative. Under the initiative SRIB also plays a role in capacity building of faculties by conducting faculty development programs (FDP), workshops, training programs, and also provide internships to faculties.

Under the initiative collaborative projects with faculties and includes activities like writing proposals to funding agencies, industry sponsored projects, institutional sponsored projects towards developing a POC, joint IP generation and publications. These activities paves ways towards experiential learning for students through collaborative projects evolving them to think beyond academia, and providing exposure to industry culture.

Identified Facilities

- Image Capture and Quality Assessment setup
- 3D Capture/Volumetric capture setup
- Augmented and virtual reality setup
- Computing facility
- Storage and server area

Investment for the lab infrastructure during Phase-1

Institute (KLE Tech)	Approximately (₹122 Lakhs)
SRI-B	Approximately (₹120 Lakhs)
Total	2.42 CR

Assets available in SEED lab

List of Assets:	Quantity
• Imatest Master License.	01
• Wireless Reflective Lighting Systems (4 Sources).	04
• Wall Panel (75 x 48) Mounted on Rolling Stand Painted	01
• Samsung LED 189cm 75NV7100 UHD/4k	01
• Microsoft TAB	01
• SERVER (Xeon Processor,8GB RAM, I5 4th Generation, 3.10Ghz, Quad Core,2TB HDD)	02
• HP 280 G6 MT Systems	20
• Dell PowerEdge R740 Server (DELL)	03
• NAS Storage (100 TB)	01
• NAS Storage (50 TB)	01
• 24-inch Samsung Monitors	8
• BenQ SW321C 32"	4
• Mobile Phones	52
• Tripods	30

List of Faculty from KLETech part of Collaboration

	Roles @ KLETech SEED	Member
Director	Administration	Uma Mudenagudi
Advisory Committee	<ul style="list-style-type: none"> • Mentorship and consultation • Outreach and ecosystem development 	<ul style="list-style-type: none"> • Ashok Shettar • P. G. Tewari • Meena S M • Nalini C Iyer
Core Team	<ul style="list-style-type: none"> • Management • Ideation and PoC development • Execution Policies/ Planning • Mentorship • Capacity Building • Publication and IP Generation • Consultation • Outreach and ecosystem development 	<ul style="list-style-type: none"> • Uma Mudenagudi • Ujwala Patil • Shashidhar Kubsad • Ramesh Ashok Tabib • Uday Kulkarni • Sunil V G
Operational Team	<ul style="list-style-type: none"> • SEED Lab Administrator (Admin) • Data Capture Lead (DCL) • Quality Control Lead (QCL) • Quality Control Staff (QCS) • Data Annotation Lead (DAL) • Data Annotation Staff (DAS) 	<ul style="list-style-type: none"> • Siddu M Kochalapurmth (Admin) • Basavarajeshwari (QCL) • Pooja Hiremath (DAL)

Infrastructure: Interiors

Entrance-Lobby



Computing area



Server room



Zoom capture



Data capture Lab



3D capture lab



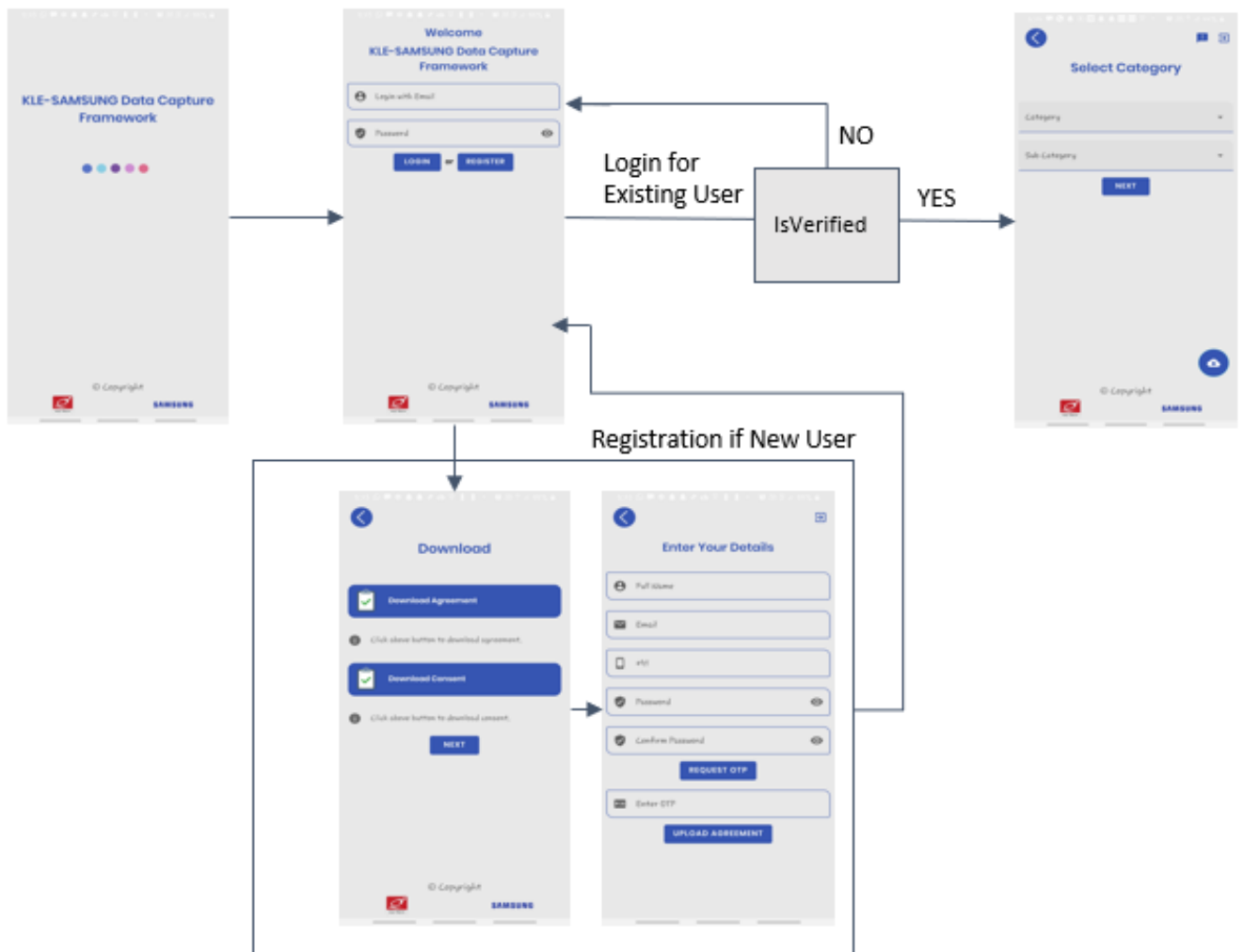
Biometric



Fire alarm



Data Capture Application: UI Design



Data Capture: Training/Workshop

Homemakers: <ul style="list-style-type: none">• 31-Dec-20 to 01-Jan 21	01
KLE Tech Students: <ul style="list-style-type: none">• 06-Jan-21 and 09-Jan-21• 02-Feb-21 and 03-Feb-21	02
Visual Arts Students: <ul style="list-style-type: none">• 09-Jan-21	01

