

KLE Technological University emphasizes experiential learning and gives importance to Projects. At every level, students engaged in concept generation and converting those concepts into reality. To motivate and showcase the student talent and efforts, an annual exhibition “**OPEN HOUSE**” started for mini, major and capstone projects. During this exhibition, selected projects from departments are exhibited at one place. All stake holders are invited and projects are explained by the students. The Judges evaluate the projects; cash prizes are given for the best projects.

- 2018 - 19
- 2017 - 18

Dr. Suneeta Budihal, Dr. Ujwala Patil  
Coordinators, Open House Exhibition

Research and Development Cell

# Open House Project Exhibition - 2019

Project, REU and IRP Competition

May 4<sup>th</sup> 2019, 9:00 AM to 5:00 PM | Venue : 2<sup>nd</sup> Floor, C-lite Building



### List of Projects - 2019

Department	Project title
Bio Technology	Isolation, Screening and Preliminary Characterization of Microorganisms Producing Protease.
	Isolation and Screening Of Microbial Strains From Coastal Regions For Production Of Industrially Important Enzymes
	Isolation, Screening and Preliminary Characterization of Protease Producing Mesophiles.
	Isolation and Screening Of Microbial Strains From Coastal Regions For Production Of Industrially Important Enzymes
	Production, Statistical Optimization, Purification and Characterization of Microbial Pectinase.
	Production of Bacterial Lipase and Screening for Influencing Media Components Using OFAT and PB Design.
	Studies on Isolation and Identification of Pigment Producing Bacteria and Chracterization of the Extracted Pigment.
	Identifying New Therapeutic alternatives for the treatment of tularemia a rabbit fever by an In-Silico approach
	Production and Applications of Bacterial Protease from fresh Water habitat
	Isolation, production, Optimization and characterization of Naringinase.
Automation & Robotics	Smart Home Automation System
	Automatic Milking Bot
	Sleep Detection System for ADAS
	Waste Plastic Recycling for 3D printing filament
	Autonomous pesticide spraying machine
	Automatic Storage and Retrieval System
Computer Science	Augmented Reality based 3D assembly instruction application
	An augmented jewellery try-on application
	Design and develop a block chain based insurance document verification system
	Open Stack based private cloud with services upon Hadoop and Spark framework and Docker swarm and Kubernetes
	Discriminant Analysis and Prediction of Active, Dormant, and Non-Donors
	Predict the change in the values of the United Nations Millennium Development goals for the year 2008-12
	Design and develop AI model to classify C.elegance nematode under ablation of different motor neurons
	design and develop a Bionic methodology which can select a nature inspired strategy for a given design space
Civil Engineering	Enhancing the Properties of the Expansive Soil of North-Karnataka Using Biopolymers
	Siesmic analysis of RC multi storey building with soft storey
	Prediction of Compressive Strength of Concrete by Machine Learning
	Laboratory Investigation on Effect of Rejuvenated Rap on Mechanical Properties of Bituminous Mix
	Experimental study on compressive strength & Luminous intensity of translucent concrete
	Domestic Solar Water Purification system for Rural India
	Experimental Investigation of Electromechanical Property of Graphene in a Cement Mortar Paste for a SHM Application
Investigation on sensing properties of cement based nano-composites using MWCNTs for structural health monitoring parameters	
Electronics and Communication	Adaptive cruize control (RTOS course)
	Accident detection and alert system (RTOS course)
	Electronic voting machine (ARM course)
	ATM (ARM course)
	Virtual autonomous simulation platform

Electronics and Communication	Autonomous functionality vehicle model
	Data acquisition with I2C sensor network 4-bit interpretation
	Smart attendance management system
	Sensor tags
	Pipeline inspection system
	Advanced Braille system
	3D printing
Electrical & Electronics	Sensor Based Assistive Technology For Visually Impaired By Using Position Location Device.
	Design & Development Of Electric Wheel Chair Control Based On Mobile Application
	Elevator Control Systems
	IoT Based Home Automation
	Dtmf Based Load Control (Home Automation)
	Fpga Based Digital Control Of Dc-Dc Converter For Battery Charging System.
Mechanical	Battery Powered Electric Vehicle Employing Permanent Magnet Dc Motor
	Carrot washing and leaves cutting machine
	A device to precisely peel areca nuts.
	Edible straw making machine.
	Ghee making machine
	Electric powered herbicide spraying and inter-cultivator vehicle
	Water efficient toilet commode
	Urban Mobility- Smart Tricycle
	Coconut oil extraction
	Electric Bike
	Automated wheelchair cum stretcher
	Automated Multifunctional Agricultural vehicle
	Smart UAV
E-Cycle	
PHEV-Hybrid vehicle.	





Open House-2018



**KLE** Technological University  
 Creating Value  
 Leveraging Knowledge  
 KLE TECH

KLE Society's  
 B. V. Bhoomaraddi College  
 of Engineering & Technology



Research and Development Cell

# Open House Project Exhibition - 2018

(Project and REU Competition)  
 April 27<sup>th</sup>, 2018  
 9:00 AM to 5:00 PM





**Venues:**

REU, Social Innovation, Engineering Explaoration	Engineering Design	Projects and Machine Learning Projects
<b>Library</b>	<b>LHC</b>	<b>School of EC</b>



## List of Projects – 2018

Department	Project title
Automation and Robotics	Isolation, Screening and Preliminary Characterization of Microorganisms Producing Protease.
	Design a system to meter the flow into the bottles
	Develop a two-armed manipulator
	An advanced control system for balancing bot on plate.
	Design a system to convert an existing refrigerator to smart one.
	Battery management system for EV.
	Design a surround view monitoring system for a 3 wheeler to detect human obstacles
	Design a system to convert an existing refrigerator to smart one using IOT.
	An advanced control system for balancing bot on plate.
	To Design and develop Humanoid Robot as an experimental platform.
Biotechnology	Isolation and Preliminary Characterization of Protease Producing Fungi
	Isolation and Preliminary Characterization of Amylase Producing Bacteria(mini Project
	Production of Amylase and study of effect of physico-chemical parameters by isolate G2
	Production of Protease and study of effect of physico-chemical parameters by isolate G3
	Production, Purification and Characterization of Fungal Bio-surfactants.
Optimization of Process Parameters for Lipase production using Statistical tools	
Civil Engineering	Design of Car showroom
	Restoration, retrofitting of an existing building, a case study
	Partial Replacement of cement with Binary Binders
	Comparative Study of Performance of Sustainable Warm Stone Matrix Asphalt stabilized with Shredded Waste Plastic & Conventional Stone Matrix Asphalt
	Adsorption of Fluoride from Water Using Nanoparticles of Iron and Aluminium Oxides Embedded with Activated Sugarcane Bagasse
	Application of BIM (Building Information Modeling) in Construction Industry
	Designing manufacturing and testing of plastic paving blocks
Optimum Usage of Water Through Mulching Irrigation for Bean Crop	
Computer Science	Image Forgery Detection Using Gray Level Co-Occurrence Matrices
	Po-Mina
	Settlement Of Pensions Cases In Swr
	Fault Recovery System of GDV Wearable Devices
	Progressive Union
	3D Object Retrieval
	DDOS Detection System For Open Stack Based Cloud
	Framework For Automatic Diagnosis Of Psychological Disorder
	Design And Develop The 3D Simulations Of Science Experiment
	Dendro Tracker
	Next Generation Sensor Development
	Automatic Wheel Chair Using Mems Sensor For The Disabled People
Taxonomy Of Web Pages	
Sign Language Translator	

Electrical & Electronics	Selection of Suitable Wind Turbine for a Given Wind Power Producing Site
	PV Powered Closed loop Torque Control of PMDC Motor
	Closed loop control of Self Excited Induction Generator
	Multi – quadrant Operation of PMDC Motor
	Automatic Power Factor Correction using 8051 Microcontroller
	Automatic Monitoring & Control of IP Set Using IOT
	Embedded System based approach to Economic Load Dispatch
	Hardware Implementation of Solar Tracking System and Performance Analysis Using 8051 Microcontroller.
Electrical & Electronics	Investigation of Dynamic Stability Performance Improvement of SMIB Power System with the Co-ordinated Application of PSS & TCSC
	Wind Generation Dynamic Simulation Connected to an Electric Grid
	Sampling and Reconstruction of periodic Signals using C and Data Structures
	IoT based Smart Energy Meter
Electronics & communication	Electronic two-wheeler ignition using super capacitor battery.
	AC and Telemetry system for student formula car
	Motion Planning for AEV
	Driver Assistive System
	Modeling and design of BGR
	Mixed IC design elapsed time counter
	Obstacle detection using Liadar
	Autonomous Electric vehicle
	KPIT Sparkle
	Power management System
	Water management system
	Obstacle detection using Radar
	Accident prevention system using BCI technology
Pothole mitigation system	
Mechanical Engineering	Water over flow conservation system
	Design and fabricate remote controlled vertical take-off and landing plane for different applications
	Development of composite material for automotive applications
	Design and fabrication of quadcopter for building lineout purpose
	Assistance to physically challenged people and senior citizens in Indian railway station to board train
	Ground rolling machine installed with water collector and track marker
	Maintenance product for small scale dairy and cottages
Robotic arm	

