JSS Academy of Technical Education, Bengaluru
Department of Physics

Skill Lab Report (March 2024-June 2024)

The Department of Physics conducted a Skill Lab for the even-semester students of the 2023-24 Academic Year. Students from various branches, including CSE (A, B, and C), ISE (A, B and C) and AIML (A and B) actively participated, culminating in a total of 32 projects supervised by the faculty members of the Physics Department. The Department has received projects in various areas, including IoT, communication, smart technology, optics, energy storage, and Astrophysics. The title of the projects is mentioned below:

Sl.No.	Title	Branch	Faculty
1	Ultrasonic Radar System and Laser Home Security System Using Sensors	CSE "C"	Dr.Nityanand Choudhary
2	Moisture Detection Automatic Watering System		
3	Pinhole Camera		
4	Flame Detection System		
5	Ultrasonic Radar	AIML "C1"	Dr. Prasanna Kumara S
6	Hazardous Gas Detection and Alarming System		
7	River Boat Cleaner		
8	Fingerprint Sensor		
9	Automatic Plant Watering System	AIML "C2"	
10	Arduino Line Follower Car at Home		
11	Measurement of Distance Using Ultrasonic Sensor		
12	Understanding stellar Motion, Parallex Shifts, and Spectral Variabiality with Simbad		
13	Plastoscope		
14	Counter objects with calculator and laser beam		

15	Advance Parking System	CSE "B"	Dr. Shashidhar R
16	Smart Shoe		
17	Fingerprint Biometric Attendance System using Arduino	CSE "A"	Dr.Abhilasha Singh
18	Arduino based Water level Controller		
19	LPG Gas Leakage Detector		
20	Wireless EV Power Station		
21	Automatic Pothole Filler	ISE "C"	Ms. Sushma KC
22	Automatic Street Light Sensor		
23	Newtonian Reflecting Telescope		
24	Temperature based fan Control and Monitoring using Arduino		
25	Automated Toll gate barrier	ISE"A"	Mr.Mohanakumara LB
26	Manual 3- Speed Simple Gear Box		
27	Automated Solar Tracking System		
28	Smart Farming System		
29	Sound to Electricity Converter	ISE "B"	
30	Solar Powered Air Cooler		
31	Automatic Railway Gate		
32	Van de Graff Generator		

Ultrasonic Radar System and Laser Home Security System Using Sensors

Moisture Detection Automatic Watering System

Pinhole Camera

Flame Detection System

Faculty In Charge: Dr. Nityanand Choudhary

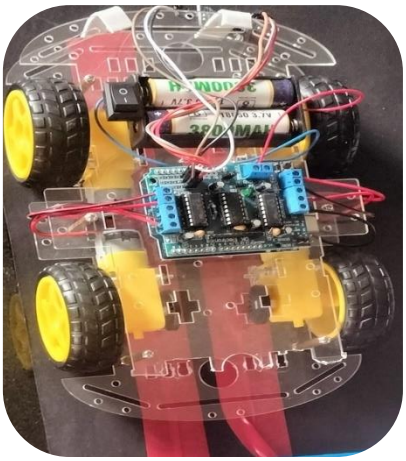
Ultrasonic Radar

Hazardous Gas Detection and Alarming System

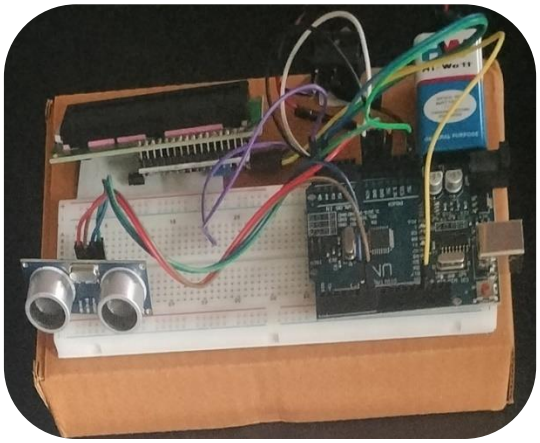
River Boat Cleaner

Fingerprint Sensor

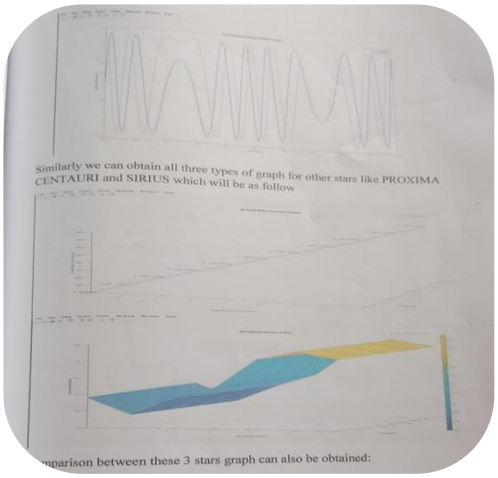
Automatic Plant Watering System



Arduino Line Follower Car at Home



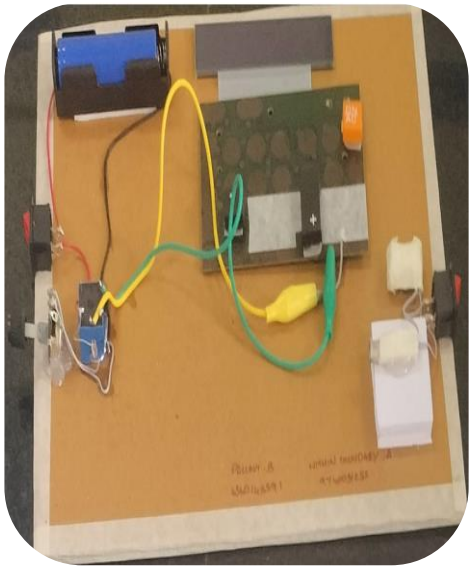
Measurement of Distance Using Ultrasonic Sensor



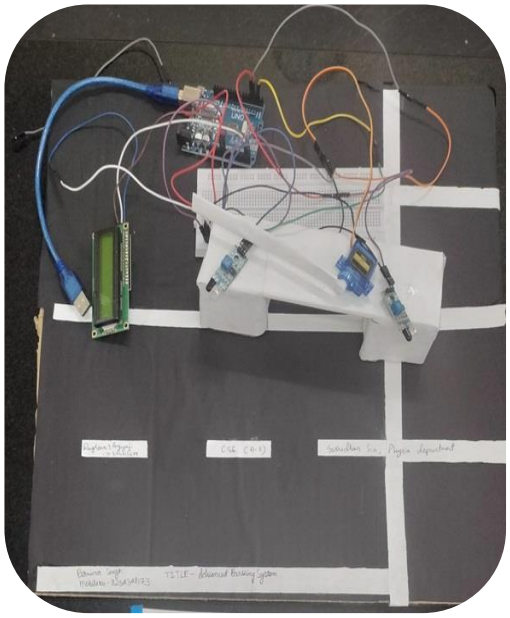
Understanding stellar motion, Parallex shifts, and Spectral Variabiality with Simbad

Faculty Incharge: Dr. Prasanna Kumara S

Plastoscope



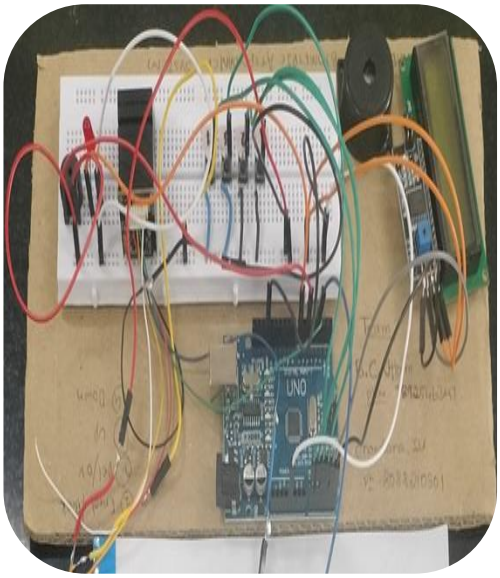
Counter objects with calculator and laser beam



Advance Parking System

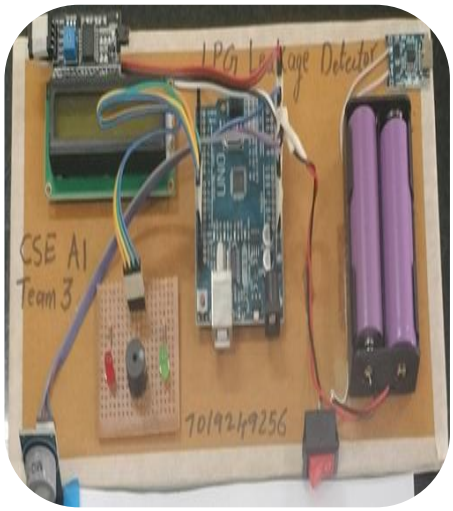
Smart Shoe

Faculty In Charge: Dr. Shashidhar R

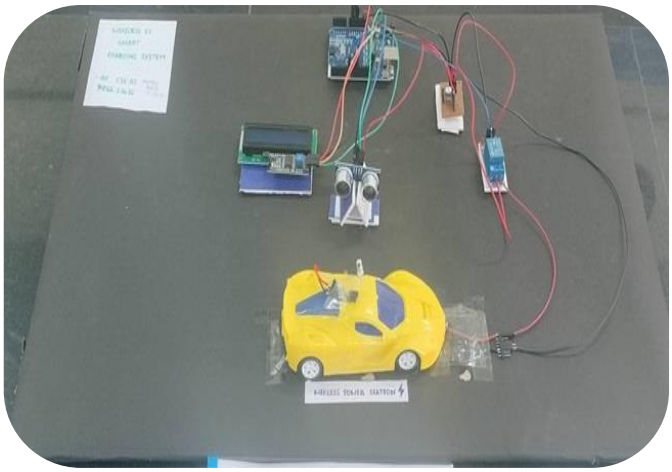


Fingerprint Biometric Attendance System using Arduino

Arduino based Water level Controller

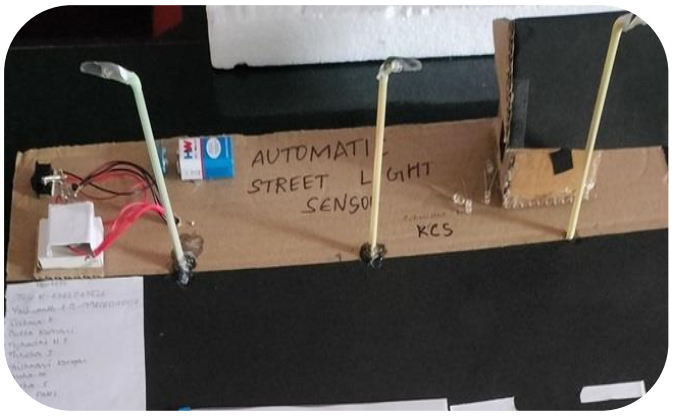


LPG Gas Leakage Detector



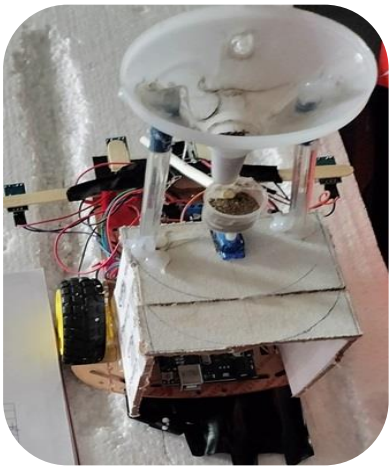
Wireless EV Power Station

Faculty In Charge: Dr. Abhilasha Singh

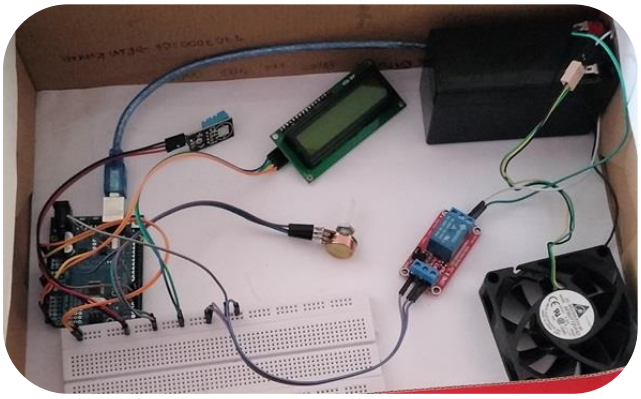


Automatic Street Light Sensor

Newtonian Telescope

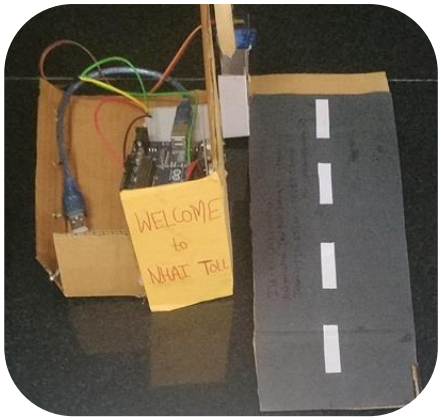


Automatic Pothole Filler

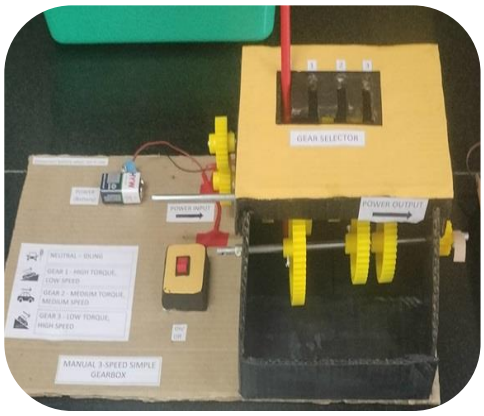


Temperature based fan Control and Monitoring using Arduino

Faculty In Charge: Ms. Sushma KC



Automated Toll Gate Barrier

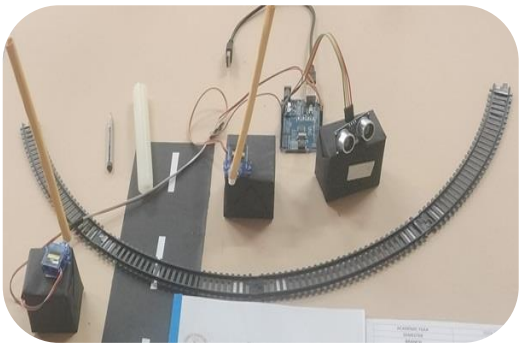


Manual 3- Speed Simple Gear Box

Automated Solar

Sound to Electricity Converter

Solar Powered Air Cooler



Automatic Railway Gate

Van de Graff Generator

Smart Irrigation System

Faculty In Charge: Mr. Mohanakumara LB

SKILL LAB PRESENTATION ON
" PLASTOSCOPE"

Moisture Detection Automatic
Watering System

OPPO F21 Pro 5G

OPPO F21 Pro 5G

PINHOLE

OPPO F21 Pro 5G

OPPO F21 Pro 5G

Skill Lab Incharge	HOD Physics
Dr.Abhilasha Singh	Dr.Shashidhar R