Sai Lokesh Gorantla
Second-Year Undergraduate
Department of Electrical Engineering
Contact No: (+91) 7330755757
E-mail: g.sailokesh9@gmail.com

ACADEMIC PROFILE

Year	Degree/Certificate	Institute/School, City	CGPA/Percentage
2024	B.Tech.	Indian Institute of Technology Kharagpur	8.43
2020	XII: State Board	Sri Chaitanya Junior Kalasala	96.8%
2018	X: CBSE	DAV Public School	91.2%

INTERNSHIP & PROJECT

Controlling DC Motors using a Joystick module and ROS | Project Mentor: Self **[April 2021]**

Objective: *To control a pair of DC Motors using a Joystick Module and ROS Nodes integrated with Atmega328p*

- Implemented ROS publishers and subscribers in Arduino for rosserial communication and integrated the necessary ROS nodes and topics to send and receive Arduino data
- Implanted L293D IC on a PCB to control the large signal from an external power supply.

IoT based patient surveillance system based on Arduino | Project Mentor: TRS, IIT Kharagpur **[July 2021]**

Objective: *To build an automatic system for monitoring patients and storing the data through a local network*

- Reading the data from temperature and SPO2 heartrate sensor and sending the data to a local server using ESP32.
- A Django dashboard to show each patient's readings and maintain an in-patient record in a sqlite3 database.

COMPETITIONS/CONFERENCES

Winter School of AI and Robotics organized by Technology Robotix Society **[March 2021]**

- Learnt about the basic functioning of AVR Microcontrollers and Timer0 in AVR family, typical mechanical drive systems that are implemented in modern Robotics.
- Basic understanding of PID control mechanism and concepts related to ROS nodes and topics, rqt graph, etc

SKILLS AND EXPERTISE

Programming Languages: C | Python | CPP | JavaScript | CSS | Bootstrap | MySQL | Django | JQuery
Softwares: ROS | FreeCAD | Gazebo | Microsoft Office | MATLAB | PX4 Autopilot
Frameworks and Libraries: Matplotlib |Numpy | OpenCV **Operating Systems:** Microsoft Windows | Linux(Ubuntu)

COURSEWORK INFORMATION

Departmental Courses: Network Theory | Signals and Systems | Analog Electronic Circuits
Non-Departmental Courses: Advanced Calculus | Probability &Statistics | Programming and Data structures | Modern Physics | Basic Engineering Mechanics |

Fundamentals of Embedded Control and Software **[Aug 2021 – Present]**

- Basics of Microcontroller architecture and AVR Programming in assembly and C.
- Controller basics and implementation (PID) and general transfer functions of open and closed loop systems.
- System modeling using MATLAB and software implementation, sensor and actuator interfacing in embedded control.
- Analysis of embedded software and optimization techniques, basics of embedded communication and task scheduling.

POSITIONS OF RESPONSIBILITY

Team Member Marketing at AIESEC in IIT Kharagpur **[Aug 2021 – Present]**

- Marketed events like Soft skills bootcamp, Unifestigo.
- Participated in NLDS (National Leadership Development Summit) organized by AIESEC in India.

Associate Member, Web Team, Entrepreneurship Cell, IIT Kharagpur **[June 2021 – Oct 2021]**

- Co-ordinated with 12 team members to build Empresario and EAD Websites.
- Worked on backend integration using Django, implemented Dynamic rendering in web pages.

GES Intern, Web Team, Entrepreneurship Cell, IIT Kharagpur **[Feb 2021 – May 2021]**

- Co-ordinated with 15 team members in contributing to the front end of StartIn 2021 Web Site
- Learnt Web development languages: HTML, CSS, JavaScript, Bootstrap

EXTRACURRICULAR ACTIVITIES

Technology
- Part of **Open IIT Case Study,** 2014 by providing solution to **IKEA** Vision with Breakeven under 3 years.

Social-Culture
- Attended National Leadership Development Summit, organized by AIESEC in India in the month of August.
- Part of **Gold** winning Rangoli Team of Lal Bahadur Shastri Hall in 2013 in Inter Hall Rangoli Competition.
- Participant at **India Calling Case Study**, Spring Fest 2014-2015 on social dynamics of freedom of speech.