

YOGENDRA AJAY

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EDUCATION

Degree	Institute / Board	Year	CGPA / %
B. Tech in Electronics and Electrical Communication Engineering	IIT Kharagpur	2020 - 2024	9.39 / 10
Intermediate/+2	Board of Intermediate Education, Telangana	March, 2020	96.7 %
Matriculation	Board of Secondary Education, Telangana	March, 2018	10 / 10

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 840** in JEE Advanced 2020 among 150,000 candidates.
- Secured **99.89 percentile** in JEE Main 2020 among 1.2 million candidates.
- Qualified for *Kishore Vaigyanik Protsahan Yojana (KVPY)* scholarship, awarded by Department of Science and Technology, Government of India in 2019.
- Awarded **Certificate of Merit** for being successful at Indian National Chemistry Olympiad (INChO) 2020.

KEY PROJECTS

Kharagpur Robosoccer Students Group

Prof. Alok Kanti Deb | Ongoing

- Working on developing a team of autonomous soccer-playing robots.
- Involved in designing **control modules** for BLDC motors.
- Conceptualized and implemented ADC, PWM and UART on **Atmega 328p** microcontroller.

Gesture Controlled Robotic Gripper

Makerspace Summer Project | Summer 2021

- Designed and constructed a robotic gripper with three degrees of freedom, controlled using hand gestures.
- Processed the captured data using **OpenCV** and **MediaPipe** libraries.
- Integrated the mechanical design with the computational part using **Arduino UNO** microcontroller.
- Established serial communication between OpenCV and Arduino UNO using **pySerial** module.

Air Quality Analyzer

DIY Course Project | Autumn 2020

- Designed a circuit to measure and display the Air Quality Index (AQI) using **MQ-135** sensor module.
- Used Arduino UNO microcontroller to process the data received from the sensor and display it on a 16x2 LCD Module.
- Included an alarm system for high levels of AQI.

SKILLS and EXPERTISE

Languages : C, C++, Python, Java, \LaTeX , Verilog

Softwares : Matlab, LTSpice, Tina TI, Eagle, Proteus, Arduino IDE

Microcontrollers : AVR (Atmega)

COURSES UNDERTAKEN

Analog Circuits + Lab, Network Theory + Lab, Semiconductor Devices + Lab, Programming and Data Structures + Lab, Linear Algebra, Numerical and Complex Analysis, Advanced Calculus, Probability and Statistics, Digital Electronic Circuits + Lab*, Signals and Systems*

* Course to be completed by April 2022

POSITIONS of RESPONSIBILITY

Sub-Head, Technology Robotix Society, IIT Kharagpur

Dec'20 - Present

- Responsible for handling various robotics events held in IIT Kharagpur.
- Responsible for maintaining Makerspace laboratory, a collaborative platform for robotics enthusiasts of IIT Kharagpur.