# **SUHITA SINGH**

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## **EDUCATION**

Electronics engineering | Kamla Nehru Institute of Technology, Sultanpur

CGPA: 9.26(2<sup>nd</sup> yr.) | 2020-present

XII (CBSE) | Shree Maha Prabhu Public School, Prayagraj

92.8% | 2019

X (CBSE) | Shree Maha Prabhu Public School, Prayagraj

10 CGPA | 2017

### **PROJECTS**

#### Quadcopter using CC3D flight controller

A Quadcopter (drone) built using CC3D flight controller and fly-sky transmitter and receiver.

# Determination of position of end effector for a 3R manipulator using ROBO Analyzer.

A project to determine the position of end effector using ROBO Analyzer software by changing various values and plotting a graph for it. Also, observing the 3D model view of a 3R manipulator and doing forward and inverse kinematics for it.

## ❖ Determination of position of End effector for a PUMA robot

A project to determine the position of end effector for a PUMA robot using ROBO Analyzer and CPROG software and perform forward and inverse kinematics on it.

## Kinematic and structural analysis of SCARA Robot.

A project to perform forward and inverse kinematics on SCARA robot using CPROG software and perform structural analysis by changing various co-ordinate values.

#### Human following robot

A robot mainly built using ultrasonic sensor, infrared sensor, ARDUINO, and servo motor etc. and programmed using ARDUINO IDE which only follows a human being and stops as soon as it gets in the contact of any other object.

## **TECHNICAL SKILLS**

- Robotics
- Drones
- **♦** C++
- HTML
- CSS
- JavaScript
- Graphic designing
- MATLAB

# **EXPERIENCE**

❖ Robotics Intern | 1Stop (Sep 5<sup>th</sup>,2021-Nov 5<sup>th</sup>,2021)

Completed 3 Industrial projects on 3R manipulator, PUMA robot and SCARA robot.

Internship in propulsion lab at IIT- Kanpur under Prof. Ajay Vikram Singh

(Jun 13th, 2023-present)

Working on image processing for the frames of recorded videos of the experiment based on "A fundamental study of boundary layer diffusion flames".

# POSITION OF RESPONSIBILITY

# Secretary | Institution of Engineers India (Students chapter)

(2022-present)

Organized technical events related to problem solving and building projects on Electrical vehicles, bridge designing etc.

# Secretary | HOBBY CLUB, KNIT Sultanpur

(2022-present)

Organized workshops on drones, 3D printing and sensors.

## Designing Executive | PFAC, KNIT Sultanpur

(2022-present)

Organized events related to photography, designing etc.