HARSH KUMAR SINGH

🏠 Agra

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CAREER OBJECTIVE

To be a part of an organization where I can fully utilize my skills and make a significant contribution to the success of the institution and at the same time my individual growth.

EXPERIENCE

Oxygen 2 Innovation: *Robotics Engineer,* Jan'19 – June'20
- Made projects for paramilitary forces (CRPF, RAF).
- Robotics – ATV, Drones, Wearable
- AI – Real-time object detection, Suspicious Activity Detection, Ad Tracking on TV Channel
- Backend APIs for IoT Related Projects

Microcontroller Based Systems & Robotics Hub, JIIT Noida: *Head Student Coordinator*, July'17- June'18
- Given lectures on manual, autonomous robotics, wireless communication, IoT for college students.
- Managed internal and external affairs.
- Successfully organized and managed a total of 14 events (2016-18) in annual cultural and technical fests of the college.

TECHNICAL SKILLS

- Areas of Interest: Robotics, AI, IoT, Full Stack Development, Web Development, Project & Team Management
- Programming Languages: JavaFX, Arduino, Node.js, React.js
- Software Skills: Git, HerokuApp, OpenCV, Image Processing, YOLOv3
- Hardware Skills: Embedded Systems, Arduino, ESP8266, ESP32, nRF24L01+, LinkIt One, Raspberry Pi, Pixhawk
- Operating System: Linux, Raspbian, Windows
- Database: MySQL, H2, MongoDB

KEY PROJECTS

- **Switch Simply**: An integrated system that enables any electrical socket to be controlled via internet.
- **Event Registration**: App for managing events and register participants.
- **Booking Management System:** App through which we can create/update/delete and manage bookings of Banquette Hall.
- **WhatsApp Chat Analyser**: App that visualise the no of text messages sent by the user, & time spent on Whatsapp.
- **Self-Balancing Bot**: Bot which can balance itself on two wheels using PID controller.
- **Quadcopter**: Quadcopter with custom made remote and flight controller.
- **Tilt Rotor Tricopter**: Multicopter which can be converted to plane during flight.
- **Pit Filler**: An autonomous bot that detects and fills the pits in its way.
- **Wearable**: An IoT integrated system on LinkIt One board for Health Monitoring and Position Tracking of the person.
- **Rescue Bot**: Bot that senses and send live footage of the scenario of a collapsed building to the outside world.
- **Alarobic Clock**: A alarm clock that turns off only when doing a particular exercise.
- **Smart Mirror**: AI enabled mirror helping user to get updated with the weather, location, health status of loved one etc.
- **Wireless Controlled Bot**: Bot that can be controlled via internet, limited ranged remote, or Bluetooth.
- **Queue Time Estimator**: Based on the queue density, it calculates the approx. time taken to reach the counter.
- **Head Gesture Controlled Wheelchair**: A wheelchair that can be controlled with head gestures.

ACHIEVEMENTS & HONORS

- Published **Research Paper** in **IC3 Conference 2019** on the topic **"A step towards Home Automation using IoT"**
- **2nd Prize** in Technocreed'15, and **3rd Prize** in Impressions'16 (LFR), Techfest held at JIIT, Noida.
- **2nd Prize** in Manual Robotics 2015, held at SRM University
- **2nd Prize** in Technovoltz, during Techfest'15, held at IIT, Bombay.
- **1st Prize** in Automation, during Cyber Srishti 2016, Techfest held at JIIT, Noida.
- **2nd Prize** in Robocon, during ESYA'16, Techfest held at IIIT, Delhi.
- **2nd Prize** in LFR, during Endeavour'17, Techfest held at KIET, Ghaziabad.
- **2nd Prize** in Project Exhibition during Cyber Srishti 2019, Techfest held at JIIT, Noida.
- Participated in Project Exhibition during IC3 Conference 2016 & 2017, held at JIIT, Noida.
- College Ambassador in Techfest'16, a Techfest held at IIT, Bombay.
- Participated in Mesh Flare, during Techfest'16, held at IIT, Bombay.

EDUCATIONAL QUALIFICATION

Degree	Discipline	Institute	Location	Year
B. Tech.	Computer Science	Jaypee Institute of Information Technology	Sec 62, Noida	2019
Senior Secondary	CBSE	Delhi Public School	Agra	2015
High School	CBSE	Delhi Public School	Agra	2013

PERSONAL PROFILE

DOB: 03-10-1997   **Languages Known:** English, Hindi   **Preferred Location:** 📍Delhi NCR
Gender: Male   **Hobbies:** Listening Music, Sports, Working on Challenging Projects