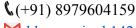


HARSH KUMAR SINGH





(7) /itsharsh



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Areas of Interest: Robotics, IoT, Web Development, Project & Team Management Languages: Node.js, React.js, Arduino(Embedded C), JavaFX, Python

Software Skills: Git, HerokuApp, OpenCV, Image Processing, YOLOv3, Darknet

Hardware Skills: Arduino, ESP8266, ESP32, nRF24L01+, LinkIt One, Raspberry Pi, Pixhawk

Database: MySQL, H2, MongoDB

EXPERIENCE

SKILLS

Oxygen 2 Innovation: Software Engineer

(July'19 – June'20)

- Introduced tools like Git (Version Control) & ClickUp (Project Management) in the organization's workflow.
- Al Tech Lead for 2 Projects helping the organisation to deploy their projects in an efficient and organised manner.
 - o AdTracker Tool to keep track of 3 types of Advertisements (i.e FCT, Non-FCT, Branding) running on live TV.
 - o Situational Awareness System Real-Time Object Detection tool integrated with Army Vehicle to detect and alert them about 18 different suspicious activities which arise in different Riot situations.
- IoT IECS An integrated system for Health Monitoring and Position Tracking of the soldier using Linkit One Board.
- loT Smart Plug Designed Cost-Effective DIY Kit for School Students as to teach them about loT using the MIT App Inventor, NodeMCU and Thingspeak's API.
- NodeJS Developed Backend APIs for IoT Projects.

Oxygen 2 Innovation: Robotics Engineer - Intern

(Jan'19 - June'19)

- ATV Pixhawk controlled ATV, Wireless Control with Autonomous Path Planning.
- Drones Delivery of Payload (Smoke Grenades/Life Jackets), Surveillance, Tllt Rotor Tricopter.
- DFTC Helped the mechanical team by building a tool to calculate Drone Flight Time based on various parameters.
- AI Smart Mirror DIY Kit for School Students to see weather info, time, date and Health status of their family persons along with their current location.

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.

DOB: 03-10-1997

• Successfully organized and managed a total of 14 events (2016-18) in annual cultural and technical fests of the college.

KEY PROJECTS

- Switch Simply: An integrated home automation system which helps the user to operate their appliances via the web app.
- Event Registration: Java Based Portable App for managing events and registered participants.
- Booking Management System: MERN App to create/update/delete and manage bookings of Banquette Hall.
- WhatsApp Chat Analyser: App that visualises the no of text messages sent by the user, & time spent on Whatsapp.
- Self-Balancing Bot: Bot balancing itself on two wheels using PID controller, nRF24L01+, MPU6050.
- Quadcopter: Quadcopter with custom made remote and flight controller using Arduino and MPU6050.
- Rescue Bot: Bot that senses and send live footage from inside a collapsed building to the outside world.
- Alarobic Clock: A alarm clock that turns off only when doing a particular exercise.
- Wireless Bot: Bot that can be controlled via the internet, limited ranged remote, or Bluetooth.
- 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.
- College Ambassador in Techfest'16, a Techfest held at IIT, Bombay.

EDUCATION

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

Languages Known: English, Hindi

Preferred Location:

Delhi NCR

Hobbies: Listening Music, Sports, Working on Challenging Projects