

Vansh kumar

Stem Innovation Engineer



1 Year 0 Month



(+91) 8744021830



kvansh749@gmail.com



Profile Summary

Electronics Engineer with hands-on internship experience at Bharat Electronics Ltd. in FPGA, Automation, and Embedded Systems. Skilled in working with microcontrollers, I've contributed to automation, IoT, and robotics solutions across a company. Currently serving as an Innovation Engineer at STEMROBO TECHNOLOGIES PVT LTD, I collaborate with a passionate team to drive innovative tech solutions and support strategic goals. Eager to keep learning, growing, and making a meaningful impact in the field of technology.



Education

B.Tech/B.E., 2024

Raj Kumar Goel Institute of Technology,
Ghaziabad

12th, 2020

CBSE, English

10th, 2018

CBSE, English



Work Experience

Jul 2024 - Present

Stem Innovation Engineer
Stemrobo Technologies Pvt Ltd

I'm a STEM Innovation Engineer who leads student and teacher training programs focused on cutting-edge technologies and innovative project development. We explore and implement future-driven ideas using programming languages, Embedded systems, IoT systems, robotics, drones, and more. Our hands-on approach includes working with a variety of microcontrollers (such as Arduino, ESP32, and NodeMCU), sensors, actuators, displays, robotic arms, and other electronic components. The goal is to equip participants with the practical skills and creative mindset needed to thrive in the evolving tech landscape.



Internship

62 Days

FPGA IMPLIMENTATION OF UART PROTOCOL



Key skills

- Research and Development
- Quartus
- ModelSim
- Html/Css
- Digital Electronics
- VHDL
- Electronics Engineering
- C Programming Language
- Microcontroller
- Problem Solving



Personal Information

City **Ghaziabad**
Country **INDIA**



Hobbies

- Researching emerging technologies and innovations
- Exploring advancements in IoT and smart technologies
- Regular gym workouts for fitness and discipline



Languages

- English

- Hindi



Extra curricular

Sketching

Sketching as a creative outlet

Playing Indoor and outdoor games

Bharat Electronics (BEL)

Interned at the D&E RADAR Department, Bharat Electronics Ltd. (Sahibabad, Ghaziabad) for 8 weeks, where I designed and developed a real-time embedded system for UART communication. Implemented logic using VHDL and deployed it on FPGA hardware for practical realization



Projects

92 Days

Humerus bone fracture detection utilizing yolov4 algorithm

- Spearheaded a project applying the YOLOv4 algorithm to detect humerus bone fractures, demonstrating expertise in deep learning techniques.
- Collaborated with a team to develop and implement the model, contributing to advancements in medical imaging technology, showcasing adept problem-solving skills and adaptability in a research environment.

61 Days

Drone

- Developed a quadcopter using a KK flight controller board, implementing an efficient design approach.
- Integrated a receiver on the quadcopter to receive user inputs via a transmitter for controlling the flight operations.

30 Days

Staircase climbing car using aurdino

This project aims at developing a mechanism for easy transportation over stairs. The stair climbing robot can efficiently climb stairs or uneven surfaces which makes it capable for search and rescue operations during earthquakes or other natural calamities, where human life can be in danger.

35 Days

AGRI-NEER

- Designed a multipurpose Agricultural Robo Car integrated with bioaponics and coconut husk filtration systems, addressing modern farming challenges with functionalities including seed sowing, irrigation, pesticide sprinkling, soil ploughing, digging, and drilling, driving efficiency and productivity.
- Implemented Bluetooth and RF modules for remote control, automating labor-intensive tasks and reducing manual effort.



Certification

- Google certification in the field of machine learning using python from developer students
- Microsoft learn student ambassador in the field of machine learning using python
- certificate of excellence in the GDPI PDP APTITUDE JOB WORKSHOP
- certificate of appreciation in online quiz from RKGIT
- certificate of participation in workshop of Matlab and it's application

