Vaibhav Naware

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EDUCATION

St. Vincent Pallotti College of Engineering and Technology, Nagpur	June 2022
B.E Electronic and Telecommunication	*CGPA:9.58/10*
R.S.S.G.K Agrawal College of Science,Tumsar (Higher Secondary Education)	June 2018
	74.46 Percentile
Matoshree Vidya Mandir, Tumsar (Secondary Education)	June 2016
	71.40 Percentile

SKILLS

Languages: C/C++, Embedded c, Python, HTML/CSS
Tools: Git/GitHub, Unix Shell, VS Code, Arduino IDE, Autodesk Eagle, MATLAB, Autodesk Fusion360, Postman
Controllers: Silicon Labs EFR32XG12, EFR32FG25, EFR32ZG28, Arduino, ESP32/8266, Raspberry pi, Atmel, STM32
Wireless Technologies : Wi-SUN, LoRA, Wi-Fi, Bluetooth

PROJECTS

Wi-SUN Mesh Network deployment | *W-SUN, Rpi, Simplicity Studio,Ubuntu, Raspbian*   Nov 2023 to March 2024
- Implemented the development and deployment of 65 Wi-SUN Border Routers, Routers, and LFN Nodes throughout the IIIT Hyderabad campus to enable real-time control of campus streetlights and collect sensor data.
- Used Different Field Area Network for research purpose

Water Quality Monitoring Device | *Arduino IoT 33,c/c++,VS Code*   Feb 2024
- Developed an IoT-based water quality monitoring device using Arduino Nano IoT 33 to measure pH, TDS, temperature, and turbidity, enhancing real-time data collection and analysis

Home Automation | *Python,YAML,c/c++,Rpi, Raspbian*   Aug. 2023
- Implemented home automation using Home Assistant to control fans, lights, windows, and door locks.

Manhole Indication and Accident Prevention System | *ESP32,Eagle,Fusion 360,C/C++*   Aug. 2022
- Developed an automated flag and cover system for manholes, enhancing street safety by providing visual alerts and preventing injuries

Automatic Cattle Rescuer Using Atmega328p | *Atmega328p, Arduini IDE, c/c++, Fusion 360, Eagle*   Aug. 2022
- Designed and developed an automated cattle rescue system using Atmega328p for effective animal evacuation during flood conditions

Pick and Place Robot Using ESP8266 | *Java, Maven, API (Spigot), Git, IntelliJ IDEA*   Aug. 2022
- Developed an ESP32-based pick and place robot with a custom control application using MIT App Inventor.

RESEARCH PUBLICATIONS

- **Design and implementation of hybrid low power wide area network architecture for IoT applications**

- **A Wi-SUN Network-based Electric Vehicle Charging Station using Open Charge Point Protocol (OCPP) and oneM2M Platform**

- **Smart Street Light System using Wi-SUN and oneM2M**

EXPERIENCE

Smart City Research Center IIIT Hyderabad | *Research Engineer*   Jan 2023 – Present

Worked on several IoT projects in the area of water, lab automation and streetlights automation using Wi-SUN Technology

Represented the Smart City Research Center, engaging over 5000 students, startups, CEOs, and CTOs from major MNCs and government sectors

Leading the hardware team and its projects.

Conducted interviews with over 200 students for positions as hardware engineers and interns.

Smart City Research Center IIIT Hyderabad | *Internship*   Dec 2021 - Dec2022

Worked on several IoT projects in the area of water, lab automation and streetlights automation using Wi-SUN Technology

Ask India Technosys Private Limited | *Internship*   Jun 2021 - Nov 2021

6 months experience on pcb designing for embedded systems

Rlabs Nagpur | *Internship*   May 2020 - Aug 2020

developing unit testing programs, design and developing the product using Atmega controller

ACHIEVEMENTS

- **Played a pivotal role in pioneering the successful introduction of Wi-SUN Phase 1, 2 and 3, marking the first-ever implementation of these technologies in India**
- **Participated as an exhibitor representing IIIT Hyderabad's SCRC at the India Mobile Congress 2022**
- **Represented IIIT Hyderabad's Smart Cities Research Center as a delegate at India Mobile Congress 2023**
- **Best User Application Award in International oneM2M Hackathon 2023 (prize: 1000000 KRW)**
- **Best Technology Award in Korean Hackathon 2022 (prize: 1000000 KRW)**
- **Winner of e-Yantra Innovation Challenge IIT BOMBAY(AIR-2)**

EXTRA CURRICULAR ACTIVITIES

- **Co-coordinator Technex Cranebot '20 (Annual Technical Event)**
- **Coordinator of Paper Presentation Competition Techxegesis 21**
- **Library Student Coordinator**
- **Class representative for three consecutive years in college**