Vivek Kumar Vishwakarma

BTech | Artificial Intelligence | Machine Learning | Embedded Systems | IOT

GitHub | Linkdln | Leetcode

Contact

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EXPERIENCE

Pantech.AI (July-September 2024)

Intern, Embedded System Design & IoT

• Gained hands-on experience with ARM Cortex M4, Embedded C, PCB Design, and IoT.

EDUCATION

Vellore Institute of Technology, Bhopal — *BTech (UG)*   **2022 - present**

Major in Electronics, minor in Artificial Intelligence | Achieved GPA: **8.15**

Class XII, Sri Chaitanya Junior College, Hyderabad

Achieved GPA: 9.06   **2019-2021**

PROJECTS

Voice-Controlled Robotic Car

GitHub Repo   60d

➜ Led a project team in designing and implementing an IoT-based robotic car controlled via voice commands.

➜ Integrated speech recognition technology with embedded systems for hands-free operation.

➜ Utilized microcontrollers, IoT protocols, and motor control mechanisms for real-time voice interpretation and movement execution.

➜ Enhanced skills in hardware integration, IoT communication, and AI-based voice processing for smart mobility solutions.

Arduino Humanoid Robot

GitHub Repo   **60 d**

➜ Designed and developed a **humanoid robot** powered by **Arduino**, capable of mimicking human movements and executing programmed tasks.

➜ Integrated **servo motors, sensors, and IoT modules** to enable motion control, obstacle detection, and interaction with the environment.

➜ Implemented **speech recognition and gesture control** for enhanced human-robot interaction.

➜ Programmed using **C++ (Arduino IDE)** and optimized the control algorithms for smoother movement and stability.

➜ Focused on **kinematics, balance control, and AI-based decision-making** for improved autonomous operations.

➜ Strengthened expertise in **robotics, embedded systems, and real-time motion processing**, paving the way for advancements in humanoid robotics.

Drone Optimization using Generative AI

GitHub Repo   **90 d**

➜ Core team member of 'RUDRA' in AEROTHON 2024, designing a Surveillance and Disaster Management drone.

➜ Leveraged Generative AI and simulation software to optimize drone structure, aerodynamics, and mission planning.

➜ Designed the drone for enhanced payload capacity, autonomous navigation, and real-time data transmission in disaster-hit areas.

➜ Strengthened expertise in AI-driven design, aerodynamics, and drone technology for emergency response applications.

Co-Curricular

➜ LeetCode solved 100+ problems

➜ Participated in AI/ML and IoT workshops and hackathons.

➜ Visited ISRO, BSNL, and industry conclaves to enhance practical knowledge.

CERTIFICATIONS

➜ AICTE Internship on AI Learning with TechSaksham' January 2025

➜ Certificate of Completion on Insights on Computational Data Science' November

➜ Certificate of Participation in AI/ML for Geodata Analysis' August 2024

➜ Team Leader in 'Robo Warriors' for IoT and Robotics' July 2024

➜ Certificate of Completion in Computer Vision' November 2025

➜ Certificate of Internship in Embedded System Design and IoT' January 2024

➜ Certificate of Participation in SAE India Aerothon' June 2023

➜ First Place in Karman Rocketry Event November' 2022

Primary Skills:

Programming Languages:
- C
- C++
- DSA using C++

Frontend Development:
- HTML
- CSS
- JavaScript

Backend Development:
- Embedded System
- Internet Of Things
- Embedded C

Software and Tools:
- VS Code
- MATLAB
- Jupyter Notebook

Familiar Skills:

Testing and Deployment:
- GitHub

Extra-Curricular & Achievements

- Co-Captain in Eclipsers, Sed Nebula Event'22, at VIT Bhopal University Me and My team won First Prize in the KARMAN Sed Nebula, Prize money Rs. 10,000
- Student Coordinator of Electric Vehicle Club
- Event Coordinator, AdVITya Cultural Festival, Nov'23-Feb'24

HOBBIES

- Book Reader- Enthusiastic about exploring diverse genres and authors, with a particular interest in literature, fiction, and non-fiction.
- Sports Enthusiast- Kabaddi, Cricket