Jay Vishwakarma

Roll No.:2413124
Btech
Electrical Engineering
National Institute Of Technology, Silchar

+91-7307403938
jay_ug_24@ee.nits.ac.in
Github | Website | YouTube
linkedin.com/in/jay-vishwakarma-

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech. (EE)	National Institute of Technology, Silchar	7.91	2024-Present
Senior Secondary	CBSE Board	89%	2024
Secondary	CBSE Board	99.2%	2021

Experience

- **Project Intern at Nephrocare** *June 2025 – August 2025*
  Joint Internship Program Nephrocare India & NIT Silchar
  – Designed and developed a **cloud-enabled blood flow monitoring system** for kidney dialysis machines.
  – Implemented **multi-sensor data acquisition**, intelligent software, and machine learning analytics to enhance accuracy, safety, and reliability in medical care.
  – Collaborated with professors across four engineering branches under the **Joint Internship Program** between NIT Silchar and Nephrocare India.

Projects

- **Drone-based Flag Hosting System** *August 2025*
  Robotics Developer NIT Silchar (Under guidance of Dr. Wasim Arif)
  – Designed and implemented a **quadcopter-based flag hosting system** for Independence Day celebrations.
  – Integrated drone flight control with a custom flag deployment mechanism ensuring stability and safety.
  – Worked under the mentorship of **Dr. Wasim Arif**, focusing on combining robotics with symbolic national representation.

- **DIY Raspberry Pi 5 Cyberdeck** *2025*
  Designer & Builder Self Project
  – Built a **portable cyberdeck** powered by Raspberry Pi 5, serving as a functional Linux workstation.
  – Integrated a **7-inch touchscreen display**, compact wireless keyboard with touchpad, and rugged tactical-inspired enclosure for field portability.
  – Designed for **cybersecurity, embedded systems, and IoT development**, with modularity for future upgrades (AI, networking, SDR).
  – Showcased as a personal innovation project, blending **practicality with cyberpunk-inspired design**.

- **Radar System using Ultrasonic Sensors** *2025*
  Embedded Systems Developer Self Project
  – Designed and implemented a radar system using ultrasonic sensors for object detection.
  – Developed a real-time visualization dashboard using Processing IDE.
  – Integrated servo motor control for dynamic scanning.

Key Courses Taken

- Computer Vision Basics, Machine Learning, MATLAB Onramp, Introduction to Embedded Systems, IoT Fundamentals

Technical Skills

- **Programming:** C, C++, Python, Embedded C
- **Tools & OS:** Git, Linux (Kali), MATLAB, Simulink, EasyEDA, Arduino IDE, Jupyter Notebook
- **Libraries/Frameworks:** NumPy, Matplotlib, TensorFlow (basics)
- **Hardware/Embedded:** Raspberry Pi, Arduino, ESP8266/ESP32, Sensors & Actuators
- **Domains:** Robotics, Embedded Systems, IoT, Cybersecurity, Computer Vision(beginner), Machine Learning (beginner)

Positions of Responsibility

- **Technical Team Member, IEI NIT Silchar** *August 2025 – Present*
  Institution of Engineers (India) Student Chapter NIT Silchar
  – Contributing to technical projects, workshops, and student-led innovations under the Institution of Engineers (India), NIT Silchar Chapter.

Achievements

- **DIY Self-Balancing Robot**
  Viral Online Tech Showcase 2025
  – Project post gained **50K+ views and 1.3K+ upvotes**, along with **23.7K+ views and 498 upvotes** on another platform.
  – Demonstrated robotics expertise, firmware debugging (MultiWii), and strong community engagement.

- **District Topper, Class 10 (CBSE)**
  Academic Achievement 2021
  – Secured **99.2% in Class 10 CBSE Board Exams**, ranked as **District Topper**.

Certifications

- Coursera Certification on Machine Learning by DeepLearning.AI
- Coursera Certification on Computer Vision Basics by University at Buffalo
- MATLAB Onramp Certification by MathWorks