

# Avi Raj

[aviraj1729@gmail.com](mailto:aviraj1729@gmail.com) | [70501-88600](tel:70501-88600)  
[github.com/Hawkjack1729](https://github.com/Hawkjack1729) | [linkedin.com/in/aviraj1729](https://linkedin.com/in/aviraj1729) | [portfolio](#)

## Education

### University School of Automation and Robotics, New Delhi

Nov 2021 - July 2025

B.Tech in Automation and Robotics

**CGPA: 8.3/10**

Relevant Coursework: Object-Oriented Programming, Data Structures, Fundamentals of Automation, Introduction to Robotics, Advanced Robotics, Linear Algebra, Cobotics, Control Theory, Database Management System, Software Engineering.

## Experience

### UDIP TECHNOLOGIES PVT. LTD. , New Delhi

Aug 2023 - Sept 2024

#### Computer Vision Intern

- Developed computer vision algorithms for visual data analysis and collaborated on optimizing vision systems for various applications.
- Trained YOLOv7 models with 10,000+ images, achieving 95% success in object detection using deep learning techniques.
- Improved computer vision models using deep learning and validated smart badge performance in real-world trials, achieving 63% success in object detection.
- **Technologies Used:** Python, OpenCV, YOLOv7, Django.

## Project Work

- **PhotoMingle:** (July - Sept 2024)
  - Developed a web application for exchanging event photos using computer vision algorithms.
  - Implemented event creation, invitations, and photo downloads via facial recognition.
  - Designed user-friendly interfaces for seamless event and photo management.
  - Conducted extensive testing to ensure reliability and a smooth user experience.
  - Technology Used:** Node.js, MongoDB, React.js, Express.js, Axios, SendGrid.
- **CollegeBrusters web app:** (Apr - June 2023)
  - Developed a web application offering real-time access to class schedules, attendance records, and marks.
  - Implemented secure user authentication and authorization to protect sensitive data.
  - Integrated APIs to fetch and update real-time academic information.
  - Technology Used:** Django, MySQL, Tailwind CSS, React.js, Axios.
- **Facial Recognition Systems:** (July - Aug 2022)
  - Developed a facial authentication system using OpenCV.
  - Implemented live detection techniques to enhance security and prevent spoofing attacks.
  - Technology Used:** OpenCV, Face\_recognition, React.js, Bootstrap CSS, Django.

## Skills

**Languages:** C/C++, Python, JavaScript, SQL

**Technologies & Tools:** Django, React.js, OpenCV, YOLOv7, Tailwind CSS, Bootstrap CSS, TensorFlow, Git, Github, IDx, Neovim.

## Positions of Responsibility

### Karuyantra the Robotics Club

Aug 2023 - July 2024

#### Core Team Lead

- Led a team of 15 members as the Core Team Lead of Karuyantra, the Robotics Society at my college.