

# Rohan Kurhekar

+91 7678089576 | [rohankurhekar2004@gmail.com](mailto:rohankurhekar2004@gmail.com) | <https://www.linkedin.com/in/rohan-kurhekar-8a5396252>

## PROFILE

Engineering graduate with a foundation in Electronics and Computer Science, complemented by a UI/UX minor and practical exposure to cybersecurity and cloud concepts. Brings a multidisciplinary understanding across AI/ML, soft computing, embedded systems, and digital circuit design.

## EDUCATION

Vidyalankar Institute of Technology

Mumbai, India

**Bachelors of Technology** in Electronics and Computer Science Engineering

2022–2026

## SKILLS

**Programming & Scripting:** Python, C, HTML/CSS

**Cybersecurity Tools & Concepts:** Wireshark, Nmap, Burp Suite, Metasploit, Kali Linux, Vulnerability Scanning, Network Security Basics

**Cloud:** Grafana, Prometheus, log monitoring and analysis

**UI/UX Design:** Wireframing, Prototyping, Figma(basics), Design Thinking, Canva

**AI/ML & Soft Computing:** Machine Learning algorithms, Neural Networks (introductory), Fuzzy Logic, Data Preprocessing

**Electronics & Embedded Systems:** Microcontrollers (8051, Arduino), Microprocessors (8086), VLSI Design, ADC, Digital Circuit Design

**Other Skills:** MATLAB (basic), Linux OS, Reliability, Passionate, Dedicated, Officer-Like-Qualities

## INTERNSHIP

### 1) Reliance JioLabs

Mumbai, India

June 2025

- Gained hands-on exposure to key concepts in **cloud computing, data center operations, automation, and cybersecurity**.
- Learned about infrastructure management, virtualization, network security protocols, and automation workflows used in enterprise environments.
- Collaborated in a learning-driven environment, understanding real-world applications of DevOps and security practices in large-scale systems.

### 2) Social Service internship

- Collaborated with various NGOs to support community initiatives, including tree plantation drives and educational activities for underprivileged children.
- Assisted in organizing and executing social welfare programs aimed at improving local livelihoods and environmental awareness.

## PROJECTS

### 1) VelocityVigil : Automated Speed Violation Detection System(Ongoing):

- Developing a system to **track vehicle speed** using CCTV footage at two fixed checkpoints (start and end), applying the formula  $Speed = Distance / Time$  to determine speed.
- Designing the logic to **automatically generate challans** for vehicles exceeding the speed limit, with potential deployment in high end roads like the **Atal Setu**.
- Utilized tools and technologies, integrating time-stamp data from CCTV feeds to calculate accurate travel durations.
- Emphasized real-time traffic monitoring, digital enforcement, and **smart transportation applications**.

## 2) HarvestIQ: Smart Crop Recommendation System:

- Engineered a fuzzy logic-based crop recommendation system integrating environmental and soil parameters, achieving a significant increase in optimal crop selection compared to traditional methods, according to field tests.
- Enabled **adaptive and data-driven crop planning** to support precision agriculture and improve farming outcomes.

## 3) HydroShield: Detection of Illegal Occupations along Waterfronts

- Developed an AI/ML-based system to **detect illegal occupation** along water bodies by analyzing satellite imagery.
- Implemented machine learning models to enable **automated monitoring** and support environmental protection efforts.

4) Actively Contributing to diverse projects across multiple domains, demonstrating versatility and broad technical expertise

## ACHIEVEMENTS

- Sainik School Cadet
- Associated with 6 Maharashtra NCC Battalion for 1 year

## CERTIFICATIONS

- Python Programming