

# HARSHAL THOMBARE

Pune 411038, India | [lhombare3141@gmail.com](mailto:lhombare3141@gmail.com) | +91 9075656016 | [Linkedln](#)

## SUMMARY

Enthusiastic and driven third-year Electronics and Communication Engineering student with a solid foundation in software development, embedded systems, and VLSI. Proven leadership as a Class Representative, showcasing strong communication, collaboration, and problem-solving skills. Passionate about applying engineering principles to real-world software challenges, with a continuous drive to learn new technologies, contribute to innovative solutions, and thrive in dynamic team environments.

## EDUCATION

### MIT World Peace University, Pune, India

B.Tech in Electronics & Communication Engineering (CGPA 7.42/10)

June 2026

Pursuing

### Vidya Valley Northpoint JR College, Pune, India

Secured 77.17% in Higher Secondary Certificate Examination (HSC Board)

March 2022

### Vishwakalyan English Medium School, Pune, India

Secured 71% in Class 10<sup>th</sup> Examination (CBSE Board)

June 2020

## EXPERIENCE

### VLSI Modelling and Hardware/Chip Design Program, IIT Jodhpur

June 2024 – July 2024

- **Certification**

Simulated analog circuits using LTSpice for performance analysis and optimization.  
Designed and verified digital circuits using Verilog and VHDL for FPGA/ASIC applications.  
Gained understanding of VLSI design flow and applied EDA tools for circuit development.

## PROJECTS

- **Satellite Image Cloud Detection (Python, Google Colab)**

April 2025-Present

- Built a tool to classify satellite images as *Clear*, *Mildly Cloudy*, or *Very Cloudy*
- Used OpenCV and NumPy to preprocess images and calculate cloud coverage based on pixel intensity
- Enabled easy image upload and visualization using Google Colab and PIL
- Aimed to make raw satellite imagery accessible for non-technical users (e.g., farmers, researchers)
- Technologies: Python, Google Colab, OpenCV, NumPy, PIL, Matplotlib

- **Aqua Sense : Pond Monitoring (Arduino IDE|BLYNK|C++)**

Aug 2024 – Dec 2024

- Developed an ESP32-based IoT system to monitor water quality in real-time using pH and TDS sensors.
- Integrated Blynk IoT platform for remote monitoring, with threshold alerts and data logging for proactive maintenance
- and habitat protection.

- **Food ordering Application**

(Python (Flask), HTML, CSS, JavaScript, MySQL)

April 2025-Present

- Built a food ordering web app with dynamic menu selection and total price calculation.
- Designed interactive UI using HTML, CSS, and JavaScript.
- Used Flask to handle backend logic and order processing.
- Integrated MySQL to store order data securely.

## SKILLS & LANGUAGE PROFICIENCY

- Technical Skills: Basics of C, C++, Python, Data Science, HTML, CSS, MySQL, Java, R
- Soft Skills: Leadership, Management, Presentations, Public Speaking.
- Software Proficiency: Blynk IoT, MATLAB Simulink, VS Code, Tableau, Excel, Arduino IDE.

## ACCOMPLISHMENTS

- Completed the Course of **Cisco Network Essentials**.
- Completion certificate for **Introduction to R programming course**.
- **3Stars** in PYTHON **HackerRank** coding.
- Completed certification of Data Analytics Job Simulation
- Participated in Hackathon

## EXTRACURRICULARS

- Organiser for **Triangle Trophy 2025**, MIT-WPU in the *Discipline Committee Head*
- Won Bronze Medal in National Gatka Federation in August 2023
- Volunteered for **BCS 2025**, MIT-WPU