

# MANISH DATTU MARATHE

## AI & Machine Learning Engineer

+91-7218381127 | [contact.manishmarathe@gmail.com](mailto:contact.manishmarathe@gmail.com) | [linkedin.com/in/xmanishmarathe](https://www.linkedin.com/in/xmanishmarathe) | [github.com/Xmanish8](https://github.com/Xmanish8) | Pune, India

### CAREER OBJECTIVE

Electronics & Telecommunication Engineering student (CGPA 8.32, Honors in Robotics) with hands-on experience in Machine Learning, Computer Vision, Data Analytics, and AI-powered applications. Developed DotSpeak, an AI-based Braille recognition system using YOLOv8, PyTorch, OpenCV, and Streamlit. Completed industry internships in Data Analytics and UI/UX, gaining experience in data processing, analytics, and product development. Passionate about applying machine learning to solve real-world problems and build intelligent systems.

### EDUCATION

#### B.E. Electronics & Telecommunication Engineering (Honors In Robotics)

2023 – 2027

Ajeenkya D. Y. Patil School of Engineering, Pune (SPPU) **CGPA: 8.32 / 10**

#### HSC

2022 - 2023

Ram Raj Gobal Jr. College, Nashik **Percentage : 74%**

### EXPERIENCE

#### UI/UX Designer Intern • Careasa | Pune

Jan 2026 – Feb 2026

- Designed Moodmap (mental wellness app) end-to-end — user research with 10+ users, personas, journey maps, wireframes, and high-fidelity Figma prototype
- Reduced user drop-off by redesigning 3 core screens based on usability testing; delivered developer-ready design system for dev handoff
- Applied Design Thinking throughout; collaborated with dev team for accessibility compliance and implementation feasibility

#### Python & Power BI Intern • Sami Infotech | Navi Mumbai

Feb 2025 – Apr 2025

- Cleaned and analyzed 1,000+ row datasets using Pandas & NumPy; built 20+ Power BI dashboards adopted by business teams
- Automated 4 manual preprocessing workflows — cut reporting effort by ~30%; presented insights weekly to non-technical stakeholders

### PROJECTS

#### DotSpeak – BrailleVision AI | Python | YOLOv8 | PyTorch | OpenCV | Streamlit

- Developed an AI-powered Braille recognition system that converts Braille characters into English text and speech using Computer Vision and Deep Learning.
- Trained and deployed a custom YOLOv8 Classification model for A–Z Braille recognition with high classification accuracy.
- Implemented real-time webcam-based inference and speech generation for accessibility-focused applications.
- Built an interactive Streamlit web application supporting image upload and live camera input.
- Designed an end-to-end ML pipeline including image preprocessing, character classification, text generation, and voice output

#### Patient Record Management System | Python | Tkinter | MySQL | Pandas | Matplotlib

- Built complete CRUD healthcare system managing 300+ patient, doctor, appointment, and treatment records
- Designed normalized 3-table MySQL schema; built Tkinter GUI with analytics dashboards for 6–8 disease categories using Matplotlib
- Applied OOP and MVC architecture for maintainable, scalable code structure

#### College Compass — College Recommendation Platform | JavaScript | WordPress | BotPress |

- Processed and organized data from 100+ colleges to generate personalized admission recommendations.
- Built an AI chatbot handling 50+ query types, and engineered student-to-college match engine by score & branch.

#### Ottobot — Autonomous Obstacle-Avoidance Bot | Arduino Nano | HC-SR04 Ultrasonic Sensor | SSD1306 OLED | Embedded C

- Designed and built a fully autonomous embedded bot — independently handled circuit design, component selection, assembly, and debugging
- Interfaced ultrasonic sensor to detect obstacles in real time; implemented decision logic in embedded C for autonomous left/right/stop response
- Displayed live distance readings on SSD1306 OLED via I2C communication protocol

### TECHNICAL SKILLS

Programming Languages	Python, Java, SQL, C, C++, Spring Boot, Javascript
Machine Learning & AI:	Machine Learning Fundamentals, Data Preprocessing, Feature Engineering, Regression, Classification, Model Evaluation, Computer Vision, Deep Learning Basics, YOLOv8
Libraries & Frameworks:	PyTorch, OpenCV, Pandas, NumPy, Matplotlib, Streamlit
Core Computer Science:	Data Structures & Algorithms, Object-Oriented Programming, DBMS, Operating Systems
Tools & Platforms:	Git, GitHub, Jupyter Notebook, VS Code, MATLAB, Simulink, Power BI, Tableau, XAMPP

### ACHIEVEMENTS & ACTIVITIES

- Open Source Contributor – GirlScript Summer of Code (GSSoC) 2026
- Tech Contributor – Nexus Spring of Code (NSoC) 2026
- Bronze Medal — Techfest IIT Bombay Campus Ambassador Internship Program ( 2023&2025 )
- Winner — Internal College Hackathon | Selected for National-Level Hackathon( 2024 & 2025 )
- NCC Cadet — 59 Maharashtra Bn, 2 years (AAC Aundh Military Station, CATC 715, Pune)
- ISF / IETE Member — technical forums & innovation activities
- Social Media Marketer — Technical Exploration Club (Sep 2023 – Apr 2024)

### CERTIFICATIONS

Java Developer Certification – Infosys Springboard | Oracle Analytics Cloud 2025 Certified Professional | Tata GenAI Data Analytics — Forage | Deloitte Data Analytics — Forage | MATLAB & Simulink Onramp — MathWorks | Fundamentals of Python

### CURRENTLY LEARNING

Machine Learning Algorithms | Deep Learning Fundamentals | Computer Vision with YOLOv8 | ML Model Deployment | AI Agent Workflows | Data Structures & Algorithms | Java Backend (JDBC, REST APIs, Spring Boot)

**Languages:** English, Marathi, Hindi **Interests:** Machine Learning, Artificial Intelligence, Computer Vision, Software Development