

Yash Potdar

AI/ML Engineer — Full-Stack Developer — Cybersecurity Enthusiast

📍 Pune, MH, India ✉ yashyogeshpotdar7@gmail.com ☎ +91-7028712645 🌐 yashpotdar.vercel.app
in linkedin.com/in/yashpotdar-py 📄 github.com/yashpotdar-py

Education

AISSMS's Institute of Information Technology, Pune
Bachelor of Technology in Artificial Intelligence & Data Science

2022-2026

- **GPA:** 8.02/10.00 (First Class with Distinction)
- **Relevant Coursework:** Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Reinforcement Learning, MLOps, Data Science, Cloud Computing, Cybersecurity, Software Engineering

Key Projects

Water Potability Detection System with MLOps

[GitHub](#) — [Live](#)

- Built **end-to-end MLOps pipeline** with automated preprocessing, model training, and deployment using **Docker** and **CI/CD**
- Achieved **92% accuracy** in water quality prediction using ensemble methods (Random Forest + XGBoost)
- Deployed **real-time web interface** with Flask and integrated monitoring dashboard for production use

Reinforcement Learning-Based Intrusion Detection System

[GitHub](#) — [Research](#)

- Developed **intelligent IDS** using Deep Q-Network (DQN) achieving **96% threat detection accuracy**
- Implemented **adaptive learning algorithms** that improve detection rates by **25%** over traditional methods
- Created **scalable Python framework** with automated threat response and real-time monitoring capabilities

Real-Time Drowning Detection System

[GitHub](#) — [IoT & AI](#)

- Engineered **computer vision solution** using YOLO and OpenCV for real-time drowning detection with **94% accuracy**
- Deployed on **Raspberry Pi 4** with optimized inference pipeline achieving **30 FPS** processing speed
- Integrated **IoT alert system** with SMS and email notifications for emergency response

Smart Medication Reminder System

[GitHub](#) — [Healthcare](#)

- Developed **Python-based healthcare application** with intelligent scheduling algorithms and personalized medication tracking
- Implemented **multi-user notification system** with customizable dosage reminders and adherence monitoring
- Designed **intuitive GUI interface** using Streamlit, improving medication compliance for elderly users

GenAI-Powered Social Media Automation Agent

[Project Info](#) — [GenAI](#)

- Built **intelligent Twitter bot** using GPT-3.5 and custom NLP models for personalized content generation
- Implemented **engagement optimization algorithms** resulting in **200% increase** in user interaction
- Designed **scalable architecture** with sentiment analysis and trend prediction capabilities

Publications & Research

LegacyGuard: Hybrid LLM, RAG, and Static Analysis for Multi-Lingual Vulnerability Detection

May 2025

Yash Potdar, Sahil Pawar — International Journal for Research in Applied Science & Engineering Technology

- Developed novel **hybrid approach** combining LLMs with static analysis for vulnerability detection
- Achieved **89% accuracy** in identifying security flaws across multiple programming languages
- DOI: [10.22214/ijraset.2025.71176](https://doi.org/10.22214/ijraset.2025.71176)

Professional Experience

Software Engineer Intern

Mar 2025 – Present

BnB Developers

- Architected and deployed a **CUDA-accelerated face recognition pipeline** achieving **95%+ accuracy** on 60,000+ image dataset with **60% reduction** in inference time
- Developed and launched a **responsive web platform** for Pune Union of Working Journalists (PUWJ), resulting in **45% increase** in member engagement and streamlined content management

AI & Machine Learning Intern

Jun 2024 – Aug 2024

AI Adventures

- Led **weekly AI/ML workshops** for 25+ team members, increasing technical proficiency and accelerating prototype delivery
- Established **peer-mentorship program** for new interns, achieving **40% improvement** in on-time project completion rates
- Collaborated on **production ML models** using TensorFlow and PyTorch, contributing to 3 client projects

Technical Skills

Programming Languages: Python, JavaScript, TypeScript, C++, Java, SQL, HTML/CSS, PHP, Bash

AI/ML Technologies: TensorFlow, PyTorch, Scikit-learn, Keras, OpenCV, CUDA, Reinforcement Learning, Computer Vision, NLP, MLOps, Langchain

Web & Cloud Technologies: React.js, Node.js, Next.js, Flask, Django, Docker, AWS, CI/CD

Data & Analytics: Power BI, Tableau, Apache Spark, MongoDB, PostgreSQL, Data Warehousing, DVC Pipelines

Cybersecurity: Penetration Testing, Ethical Hacking, Network Security, Vulnerability Assessment

Leadership & Impact

- **Technical Secretary** — Artificial Intelligence Students Association — Led 50+ technical workshops & events — Led a team of 10+ technical members
- **Guest Lecturer** — Data Analytics Training — Trained 100+ students in industry-standard practices
- **Google Developer Groups** — AI/ML Member — Organized 5+ technical workshops and hackathons
- **Technical Volunteer** — National Level Hackathon (Techathon'24 & Techathon'25) — Mentored 20+ participating teams

Achievements & Certifications

- **First Prize** — GeekForGeek's GeekVishwa Hackathon'23, VIIT Pune — *AI-based solution*
- **Gen AI Job Simulation** — BCG X (Forage) — *Strategy & Technology Consulting*
- **Software Engineering Job Simulation** — Goldman Sachs (Forage) — *Financial Technology*
- **IT Automation with Python** — Google (Coursera) — *Professional Certificate*
- **Full Stack Web Development** — Udemy — *MERN Stack Specialization*
- **Ethical Hacking Certification** — Internshala — *Cybersecurity Fundamentals*

Languages: English (Native), German (Intermediate), Hindi (Native), Marathi (Native), Japanese (Basic)