

Pratik Patil

+91-8484828990 | pratikpatil.me | 0xPratikPatil

Education

Vishwakarma Institute of Information Technology

Pune, India

Bachelor of Technology in Computer Engineering - CGPA: 8.6/10

Nov 2022 – May 2026

- Coursework: Cyber Security, Computational Science, Electronics Engineering, Computer Architecture and Organization, Artificial Intelligence, Machine Learning

Experience

Corning Inc.

Jan 2026 – Jun 2026

Automation & Integration Intern

Pune, India

- Developed AI agents using LangGraph to analyze ServiceNow data and automate enterprise workflows, enabling structured, context-aware decision-making.
- Built an AI-driven ticket prioritization agent that analyzed business-critical ServiceNow tickets and prioritized them using a decision matrix based on urgency, business impact, and criticality.
- Developed an AI agent for regional business intelligence that analyzed current business data and generated concise summarized reports highlighting key business conditions and insights.
- Built a team research tracker agent to monitor individual research activity, consolidate research progress, and provide visibility into team-level research contributions.
- Designed agentic workflows for enterprise data analysis, prioritization, reporting, and research tracking using Python, LangGraph, LLMs, and ServiceNow data.

Projects

Enterprise RAG Application | Databricks, RAG, Prompt Engineering, Data Pipelines, LLMs

Feb 2026

- Architected and developed a Retrieval-Augmented Generation (RAG) application from scratch on Databricks to deliver context-aware responses for user-centric AI workflows.
- Optimized the retrieval and inference pipeline, reducing response latency by 50% and improving overall system efficiency.
- Implemented data cleaning, preprocessing, and document standardization techniques to improve retrieval precision and response relevance.
- Applied prompt engineering techniques to improve response quality, contextual grounding, and overall user experience.
- Built an end-to-end data pipeline for ingestion, transformation, indexing, and retrieval, enabling scalable and reliable AI application performance.

RedEye: AI-Powered Hacking Framework | LangGraph, MCP, Next.js, Hono.js, Prisma, LLMs

Apr 2025

- Developed an autonomous cybersecurity framework leveraging multi-agent AI for real-time offensive security operations.
- Implemented Model Context Protocol (MCP)-driven task execution using LangGraph, enabling dynamic agentic attack workflows.
- Integrated 50+ cybersecurity tools across reconnaissance, exploitation, and post-exploitation phases.
- Built short-term and long-term memory, human-in-the-loop workflows, and interrupt controls for flexible agent behavior.
- Enabled secure execution pipelines with custom tool integration and dynamic LLM model and provider switching.

IoT and Embedded Systems Projects | Arduino, ESP32, NodeMCU, ATtiny85, Raspberry Pi

Mar 2025

- Built multiple real-world embedded systems using Arduino, ESP32, NodeMCU, ATtiny85, and Raspberry Pi 4B.
- Developed a WiFi and Bluetooth jammer using ESP32 to demonstrate wireless packet injection and jamming techniques for ethical security testing.
- Created a Wireless Rubber Ducky using ATtiny85 to emulate HID keystrokes and deliver custom payloads wirelessly over NodeMCU.
- Designed a Raspberry Pi-based flight computer to capture and visualize real-time telemetry using NeoGSM, BMP280, MPU-6050, Python, and sensor interfaces.

Achievements & Certifications [Link]

TryHackMe Top 2% - Solved 200+ Rooms - Complete Beginner, Cyber Security 101, SOC Level 1
APISEC - API Penetration Testing, API Security for Cars and Fleets
Amazon Certified Cloud Practitioner
Cisco - Intro to Cybersecurity, Intro to IoT, Cybersecurity Essentials
LinkedIn Learning - Docker Essentials, MongoDB Essentials, Jenkins Essentials

Volunteering & Activities

CyberCell, VIIT

Pune, India

President & Tech Team Member

Mar 2022 – Sep 2024

- Led technical and organizational teams of 60+ members to plan and execute cybersecurity initiatives, technical workshops, and large-scale community events.
- Organized VishwaCTF'24, a 48-hour global Capture-The-Flag competition with 3,000+ participants from 100+ countries, 40 challenges, and 1,500+ tickets solved.
- Facilitated cybersecurity workshops for 300+ attendees covering emerging security trends, ethical hacking, web security, and practical attack-defense techniques.
- Designed and developed the VishwaCTF'24 website using Next.js, Hono, and JavaScript, and implemented CI/CD workflows using Jenkins, Docker, and DigitalOcean.
- Developed hands-on cybersecurity challenges covering digital forensics, browser forensics, OS command injection, and API vulnerabilities.
- Conducted practical sessions on IoT security using ESP32, ESP8266, and ATtiny85, along with Jenkins, Kubernetes, and Docker.
- Onboarded industry sponsors including TryHackMe, LetsDefend, Traboda, BurpBounty, and QuickHeal for VishwaCTF'24.

AWS User Group Pune

- Participated in 10+ technical sessions covering AWS security services, identity management, cloud security, and migration from monolithic to microservices architectures.

Identity Summit Mini Orange

- Presented cybersecurity concepts to 500+ participants covering identity, access control, incident response, network security, governance, MFA, and RBAC.
- Organized and co-led 4 hands-on workshops on web security and ethical hacking, each hosting approximately 100 participants.

KCD Pune

- Applied knowledge of Docker and Kubernetes integration with CI/CD workflows, focusing on reliable software delivery and development efficiency.

Technical Skills

Languages: Python, C++, C, TypeScript

AI / GenAI: LangGraph, LangChain, LLMs, RAG, Prompt Engineering, Multi-Agent Systems, MCP

AI / ML: TensorFlow, Keras, Scikit-learn, Pandas, NumPy

Web Development: React.js, Node.js, Express.js, Hono, Next.js, Flask, Django, REST, HTML5, CSS3, Tailwind CSS

Databases & Data: MySQL, PostgreSQL, MongoDB, Redis, Firebase, Supabase, Data Pipelines

Cloud & DevOps: Databricks, AWS, Jenkins, Kubernetes, Docker, Nginx, Splunk, Kibana, Grafana, Prometheus

Tools & Platforms: ServiceNow, Git, GitHub, Figma, Framer

Systems: Linux, OS Fundamentals, Multiprocessing, Memory Management, Device Drivers, Concurrency