ADITYA RAJEEV PATIL

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EDUCATION

VIT Bhopal University   2022 - 2026
B.Tech in Computer Science and Engineering, Specialization in Cyber Security and Digital Forensics
CGPA: 8.47/10

TECHNICAL SKILLS

- **Programming & Technologies**: Python, Java, JavaScript, SQL, HTML, CSS, MySQL, Git
- **Tools & Frameworks**: Anchor, Next.js, Docker, Git, Linux, NetCDF4, Geopandas, Rasterio, Panoply, Scapy

WORK EXPERIENCE

Intern   Nov 2024 - Jan 2025
National Remote Sensing Centre (NRSC), ISRO, Hyderabad, India
- Worked under the supervision of senior NRSC-ISRO scientists on an AI-driven climate analysis
- Developed and maintained a Python data pipeline (NumPy, Pandas, Matplotlib) for processing and visualizing large geospatial datasets
- Authored a technical report on AI-driven climate analysis, archived in the NRSC-ISRO library

PROJECTS

AI-Driven Satellite Climate Analysis Project — NRSC, ISRO ↗   Nov 2024 – Jan 2025
Tech Stack: Python, NumPy, Pandas, Matplotlib, Seaborn, NetCDF, Rasterio, Geopandas, Scikit-learn, Panoply
- **Executed** end-to-end remote sensing analysis to map monthly, seasonal, and annual Blue-Sky Albedo trends from MODIS and Aerosol Optical Depth datasets
- Engineered custom preprocessing scripts for satellite data and produced composite images for Indian climate seasons ,handling 20+ years of data
- Applied regression analysis and visualized spatial trends to reveal key climate insights, supporting policy and research
- Ensured all project documentation met rigorous scientific and archival standards required by ISRO

SoilSense - AI Crop Recommendation System ⚙️   Jan 2025 – Apr 2025
Tech Stack: Python, Pandas, scikit-learn, XGBoost, SVM, KNN, Random Forest, IoT Sensors
- **Built** and tested several machine learning models (Random Forest, XGBoost, SVM, KNN) to predict the best crop based on soil sensor data (NPK, pH, moisture, temperature)
- Processed real sensor data for training; improved crop selection accuracy to 94%
- Automated data cleaning, model training, and result reporting for the project dashboard
- Compared model performance and chose XGBoost for best results in real-world tests

Chakra Recon ⚙️   Sept 2025
Tech Stack: (Python, Scapy , CLI, Linux ,Penetration Testing)
- **Engineered** a robust CLI tool for network reconnaissance and vulnerability assessment supporting ICMP, TCP, and ARP scanning
- Enables network administrators/security practitioners to enumerate hosts, open ports, and device presence
- Crafted with Scapy for advanced packet manipulation, supporting custom scan types, port ranges, and timeout configurations
- Outputs comprehensive scan reports, delivering actionable insights for network hardening

CERTIFICATIONS

- **IBM DevOps and Software Engineering Fundamentals, IBM** ↗   Mar 2025
- **Certified Ethical Hacker (CEH), EC-Council** ↗   Dec 2024
- **Geo-Data Sharing and Cyber Security, ISRO** ↗   Feb 2024

ACHIEVEMENTS & ACTIVITIES

- **Top 3% Global Ranking on TryHackMe** ↗
- **Canara Bank SuRaksha Cyber Hackathon 2025**   2025
  Finished in the Top 105 (top 2.6%) out of 4000+ teams nationwide.
- **CTF 2024 — IIIT Kottayam** ↗   2024
  Achieved **All-India Rank 51** in a national Capture The Flag competition.

LEADERSHIP AND CAMPUS ENGAGEMENT

President, Cyber Warrior Club, VIT Bhopal University   2024 - 2025
- Increased club membership by 30% by organizing tech talks and 3 Capture The Flag (CTF) challenges
- Secured 3 industry professionals to lead hands-on cybersecurity workshops for 80+ students
- Planned and executed a CTF event with 80 participants, improving campus-wide security awareness

Event Management Lead, Marathi Club, VIT Bhopal University   2024 - 2025
- Managed logistics and operations for the annual Ganpati Festival, serving an attendance of 1000+ students
- Coordinated a 2-day cultural event, managing a team of 15 volunteers and all scheduling
- Acquired sponsorships to increase the annual event budget by 15%