Amogh E M

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EDUCATION

PES University, Bengaluru, India

Aug 2023 – Sept 2027

Bachelor of Technology in Computer Science and Engineering

GPA: 8.11/10

Coursework: Data Structures & Algorithms, Operating Systems, Database Systems, Linear Algebra, Probability & Statistics, Calculus, Computer Networks, Machine Learning, Software Engineering

LEADERSHIP & RESEARCH EXPERIENCE

Information Security and Forensics Research (ISFCR), PES University

Bengaluru, India

Technical and CTF Team Lead

Sept 2023 - Present

- Directed technical initiatives and team operations within the research center
- \bullet Executed penetration tests using advanced Linux-based security tools
- Organized 5+ workshops and CTF events, engaging over 200 students.
- Served as Teaching Assistant for M.Tech Ethical Hacking, mentoring 20+ graduate students on penetration testing and vulnerability assessment.

Research Trainee June 2025 – July 2025

- Conducted research on cybersecurity and blockchain technologies
- Authored a research paper accepted for publication

Projects

Malicious Agent Detection in Multi-Agent Systems | PyTorch, scikit-learn, NumPy, pandas | ☑ Oct 2025

- Designed a hybrid CNN-RNN model in PyTorch to classify malicious agents, achieving 95.63% accuracy and using scikit-learn for performance evaluation.
- Optimized model evaluation pipelines using scikit-learn metrics and cross-environment validation.

- IEEE Conference on Cyber Security and Cloud Computing (IEEE CSCloud 2025), accepted for publication.
- Built a tamper-proof digital evidence storage system leveraging IPFS and blockchain smart contracts.

Road Safety Monitoring System | OpenCV, Keras, scikit-learn |

Feb 2024

- Developed a real-time road safety monitoring system with drowsiness detection and accident SOS features.
- Implemented live SOS alert modules with edge detection and event tracking.

Interactive Stock Market Simulation Platform | React, Node.js (Express) |

Oct - Nov 2024

- Created a full-stack trading simulator for portfolio management and real-time technical analysis.
- Implemented portfolio tracking, trading simulations, and technical analysis tools for investment training.

TECHNICAL SKILLS

Languages: C/C++, Python, Java, JavaScript, SQL Frameworks: React, Next.js, Nest.js, Flask, FastAPI Libraries: PyTorch, scikit-learn, NumPy, pandas

Developer Tools: Git, Docker, Linux

AWARDS & CERTIFICATIONS

Indomitus CTF — MIT Manipal | 🗷

Mar 2025

Ranked 5th nationally (of 21 teams) representing PES University.

Supervised Machine Learning Certificate — Stanford University |

Sept 2025

Completed a comprehensive course on supervised learning algorithms and best practices.

Intel AI Fundamentals — Intel Corporation

Jan 2022

Certified in core machine learning concepts, neural networks, and AI model deployment fundamentals.