PRAJWAL DM

Cybersecurity Engineer | Penetration Testing | AI for Security

PROFILE

Detail-oriented **Cybersecurity Engineer** with a strong foundation in **threat analysis, penetration testing, and secure system design**. Currently interning at **CySecK (FSID), IISc Bangalore**, gaining hands-on experience in real-world security assessment, forensic tools, and vulnerability management. Working on combining **AI and Machine Learning** techniques to enhance digital defense mechanisms. Keen on advancing secure AI applications and building resilient systems aligned with NIST and OWASP standards..

WORK EXPERIENCE

Cyber Security Intern – FSID, **IISc Bangalore (On-site)**
October 2025 – November 2025

- Currently working on Applied AI-driven approaches for threat pattern recognition and anomaly detection.
- Conducted penetration testing on simulated enterprise environments using Buro Suite, Nmap.
- Supported simulation of incident response frameworks and anomaly detection using AI models.

Research and Development Lead – Cyber Security Club, **Atria IT (On-site)**
February 2025 – October 2025

- Led a team developing cybersecurity awareness and risk mitigation modules for institutional networks.
- Organized workshops on ethical hacking and OWASP Top 10 best practices.

PROJECTS (https://github.com/prajwal152004)

ASL Gesture Recognition System – Designed a TensorFlow CNN pipeline for recognizing American Sign Language gestures using real-time camera input. Achieved high classification accuracy with data augmentation and optimized training loops.

KSL Gesture Recognition System – Developed a KSL (Kannada Sign Language) gesture recognition systems where we modified the previously done ASL work into our native language which helps the deaf community of a specific native region

Quantum Neural Network Simulator – Built a neural-network-based quantum circuit simulator using Restricted Boltzmann Machines (RBMs). Demonstrated hybrid quantum-classical model integration for educational and research applications.

A Blockchain Simulator- Developed a Stream-lit based blockchain simulator integrating quantum-secure transaction validation. Implemented real-time AI analytics dashboard for transaction anomaly detection.

ACHIEVEMENTS

- Selected for Cybersecurity Internship at IISc Bangalore, focusing on Cyber Security Systems.
- Research papers accepted for International Conference (Dec 2025) on AI-based Sign Language Recognition and a theory topic on Exploration of Quantum Advantage in Machine Learning
- Recognized as R&D Lead for the Cyber Security Club at Atria IT

TECHNICAL SKILLS

Security Tools: Burp Suite, Wireshark, Nmap, Nikto, Metasploit, OWASP ZAP.
Tech Stack: Python, SQL, HTML, CSS, JavaScript, Bash Basics
Concepts: Vulnerability Assessment, Penetration Testing, Threat Modeling, Risk Analysis, Firewall and Network Security
Frameworks: NIST, ISO 27001, OWASP Top 10 Awareness
Cloud & Dev: AWS, Docker, Git, Flask

EDUCATION

B.E in Computer Science and Engineering,
Atria Institute of Technology
July 2022 – July 2023
CGPA of **7.61** over 6 semesters

DETAILS

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Linked-in Profile
https://www.linkedin.com/in/prajwaldm152004/

PROFESSIONAL SKILLS

Analytical Thinking
Problem Solving
Client Collaboration
Research and Documentation
Business Communication

LANGUAGES

Kannada – Native
English – Highly Proficient
Hindi – Highly Proficient
German – Beginner A1
Japanese- Beginner A1

INTERESTS

Pen Testing
Fix Vulnerabilities
Bug Bounty
Ethical Hacking
AI Security Research