GOKUL KANNAN G

Full Stack Engineer ◇ +91 9843463600 ◇ Coimbatore, India

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SKILLS

Programming/Scripting Languages	C , Java, Python, JavaScript, HTML, CSS , C++ (IoT)
Databases	MySQL, MongoDB, Firebase
Tools	Git, BurpSuite
Frameworks	React, Node

EXPERIENCE

Ethical Hacking Intern   May 2023 − July 2023
Hackup Techbologies   *Coimbatore, India*

- Intercepted and manipulated HTTP requests/responses between clients and servers to identify and exploit web application vulnerabilities, including SQL Injection, Cross-Site Scripting (XSS), and Cross-Site Request Forgery (CSRF).

- Performed in-depth web application penetration testing using tools such as Burp Suite, contributing to verified vulnerability reports and successful bug bounty submissions.

AI Engineer Intern   Jan 2025 − May 2025
aXtr Labs   *Coimbatore, India*

- Contributed to the "EdisonQgen" project, focusing on the fine-tuning of AI and deep learning models to develop custom-built, production-ready AI solutions.
- Applied machine learning techniques for model optimization, including data preprocessing, hyperparameter tuning, and performance evaluation using state-of-the-art frameworks.
- Collaborated in an agile research environment to prototype scalable AI systems aligned with client-specific requirements.

EDUCATION

Bachelor of Technology in Information Technology   Jul 2024 - Present
PSG College of Technology   **CGPA: 6.64**
Relevant Coursework: Data Structures and Algorithms, DBMS, Operating Systems, Computer Networks, Linux

PROJECTS

VulnScan – Web Penetration Testing Tool. Developed VulnScan, a comprehensive web penetration testing tool as part of the final year project. It features 12 advanced modules including Port Scan, Domain Enumeration, Domain Fingerprinting, SQL Injection, XSS Testing, CSRF Detection, SSL/TLS Certificate Validation, Directory Enumeration, WAF Detection, and Automated Vulnerability Scanning using the ZAP API. Generates detailed vulnerability reports for target domains.

Singular Value Decomposition with PSO – Research Project. Collaborated on a PhD research project to implement Singular Value Decomposition (SVD) combined with Particle Swarm Optimization (PSO) for image matrix decomposition and enhancement. The system optimizes image quality through mathematical decomposition techniques for high-accuracy compression and reconstruction.

Razorpay Payment Exploit – Ethical Hacking Project. Conducted a security exploit on a real-world Razorpay integration in the payment system of Bio Carve (a seed-selling website), demonstrating a critical vulnerability that bypassed actual pricing to complete a purchase.

ACHIEVEMENTS

- **Syllabus Designer** – Designed the 2024-2027 Syllabus for Diploma Computer Engineering in PSG Polytechnic College