Lokesh Lakshmaiah Krishna Srinivasaperumal

814-280-3477 , lokeshlks01@gmail.com ,
github.com/loki52501

Work Experience

Infrastructure and Information Security Intern Aug 2025-Aug 2025
iMerit *Remote*

- **Reduced onboarding time by 60%** and eliminated access errors by **automating identity workflows** across Ivanti, Google Workspace, and Active Directory.
- **Improved policy compliance** by standardizing **role-based access control (RBAC)** across departments, achieved through building secure onboarding and offboarding pipelines in Python and REST APIs.

Instructional Assistant – Software Engineering Aug 2024 – May 2025
Pennsylvania State University *State College, PA*

- **Instructed** over 100 undergraduate students in core software engineering concepts, including **Java and Haskell** programming, **compiler design, and data structures.**

Cybersecurity Research Intern – Network Intrusion Detection Feb 2023 – Jul 2024
Anna University *Chennai*

- Noticed gaps in existing anomaly detection methods and developed a hybrid LSTM-CNN model trained on the UNSW-NB15 dataset.
- The system identified malicious traffic with 80% accuracy, proving that AI-driven approaches could enhance intrusion detection capabilities
- Documented results and presented findings to faculty, simulating real-world incident response reporting workflows.

Platform Engineer Intern – Cloud Security Jul 2022 – Dec 2022
Invisbl *Chennai*

- Redesigned AWS IAM policies following NIST 800-53 AC (Access Control) and CIS AWS Foundations Benchmark guidelines, reducing excessive privileges and strengthening least-privilege enforcement across accounts.
- Built automated cloud threat detection workflows in Python and AWS Lambda, integrating with Elasticsearch to generate near real-time alerts for high-priority security events in alignment with ISO/IEC 27001 (Operations Security).

Projects

QUIC Protocol Reimplementation and Optimization Sept 2025 – Dec 2025
C++ — gRPC — Wireshark — Docker

- Reimplemented the QUIC transport protocol in C++ with custom congestion control and packet pacing, reducing average RTT by 25%.
- Integrated gRPC for multi-language benchmarking and Wireshark for live packet tracing within a Docker-based latency simulation testbed.

AI-Driven Streaming Infrastructure Simulator Oct 2025 – Dec 2025
Python — FastAPI — AWS EC2 — React

- Developed an adaptive media streaming platform using AI-based bitrate prediction to reduce buffering under variable network load.
- Implemented Server-Sent Events (SSE) for real-time token delivery and optimized frame compression for low-latency playback.

Certifications and Achievments

Security+ by Comptia Sept 2025-2028

Education

Penn State University State College, PA
Master of Science in Cybersecurity Operations and Technology *Aug. 2024 – May 2026*
Related courses: ML concepts, gpu programming, network protocol designing, CCNA prep.
CGPA: 3.6

Anna University Chennai
Master of Science in Information Technology *Aug. 2019 – July 2024*
Related courses: Computer Networks, Software and Hardware Architecture, Data visualization(Power bi), Data Analysis, Java, C++, Python
CGPA: 3.4

Skills

Programming Languages and Database systems: Java, C++, Python, Postgresql and MongoDB.
Cloud technologies and Devops:AWS, Kubernetes, GPS, Azure, Github, Gitlab and Ona.
Cybersecurity Skills: Network protocol designing.
AI Skills: Prompt Engineering and MCP development.