Arumilli Abhiram

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EDUCATION

Vellore Institute of TechnologyChennai, IndiaBachelor of Technology in Computer ScienceSep. 2021 - April 2025Tirmula Junior KalasalaAndhra Pradesh, IndiaSenior Secondary (XIIJun. 2020 - May 2021Sri Gowthami E.M High SchoolAndhra Pradesh, IndiaHigh School(X)Jun. 2018 - May 2019

Projects

- Designed and implemented a dual access control system combining Diffie-Hellman key exchange and AES encryption for securing cloud storage.
- Integrated attribute-based filtering to proactively block unauthorized access and enhance overall system protection.
- Successfully mitigated Economic Denial of Sustainability (EDoS) attacks in a public cloud setup using a layered security approach.
- Achieved accuracy in unauthorized access detection during real-world testing on AWS, without impacting system
 performance.
- Developed a scalable cloud security framework balancing strong data protection and operational efficiency for IT and academic sectors.

Prevention Mechanism for Replay attack in 6G wireless networks | Linux, NS-3 Dec 2024 - April 2025

- Simulated and analyzed replay attacks in a 6G network using NS-3, focusing on vulnerabilities in low-latency communication links.
- Designed a timestamp-based validation mechanism to detect and prevent replayed packets at the receiver node.
- Built a modular sender-receiver-attacker architecture with Point-to-Point links to replicate real-world 6G network behavior.
- Captured and visualized network traffic using Wireshark to verify the success of the attack and the effectiveness of the prevention system.
- Achieved reliable packet freshness validation without impacting system performance, demonstrating practical defense against replay attacks.

CERTIFICATIONS

AWS Certified Cloud Practitioner Dec 2023

Google Cloud Certified Digital Leader Dec 2023

Python for Data Science, IBM July 2024

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, HTML, R

Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio

Libraries: pandas, NumPy, Matplotlib