# VIJAYAVARMAN ARUNASALAM HARIKRISHNAN

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#### **SUMMARY**

Cybersecurity grad student at RIT, driven by the challenge of solving digital security puzzles. Proficient in spotting vulnerabilities and applying threat detection and risk management strategies to enhance organizational security. Looking to contribute to a collaborative cybersecurity team where creativity and adaptive thinking lead the way.

#### **EDUCATION**

# M.S. Cybersecurity

Rochester Institute of Technology, Rochester, NY

CGPA - 3.96/4

Aug 2023-Dec 2025\*

• Relevant Coursework: Cryptography & Auth, Cyber Analytics & ML, IoT Security, Network Security, Computer System Security, Social Engineering, Covert Communications, Information Security Policy & Law, Adv. Computer Forensics

#### **B. E. Computer Science & Engineering**

Meenakshi College of Engineering, Chennai

CGPA - 8.3/10

Aug 2016-Apr 2020

# **SKILLS**

- Languages: C, Java, Python, SQL | Operating System: Windows, Linux (Ubuntu, Kali Linux), Windows Server 2019.
- **Tools:** Wireshark, Nmap, Metasploit, Burp Suite, Snort, Wazuh, FTK Imager, Autopsy, Cisco Packet Tracer, John the Ripper, Hydra, Maltego | **Frameworks:** NIST CSF, NIST RMF.

# **CERTIFICATIONS AND COMPETITIONS**

• Google Cybersecurity Professional Certificate

Feb 2025

• **CompTIA Security+**: (SY0-701) – Credential ID: BBYQNNMZGER4Q89Y

Aug 2024

- **CyberSeed 2024 CTF**: Completed 87% of challenges and placed 23rd out of 160+ teams, focusing on OSINT, Cryptography, Password Cracking, and Network Traffic Analysis. *Mar 2024*
- SC-900: Microsoft Security, Compliance, and Identity Fundamentals

Apr 2022

• AZ-900: Microsoft Azure Fundamentals

Mar 2022

#### **PROJECTS**

#### Legal Compliance Analysis for Breach Remediation

Oct 2024 - Dec 2024

- Collaborated in a team of 4 to analyze a simulated organization's data breach, identifying non-compliance with regulations such as HIPAA, PCI DSS, GDPR, GLBA, and NYDFS.
- Applied the NIST Cybersecurity Framework (CSF) to propose actionable solutions for closing compliance gaps and strengthening privacy and security measures.

#### IDOTS+: Enhancing IoTDots for Smart Environments

Mar 2024-May 2024

- Created an IoT forensics framework using Convolutional Neural Networks (CNNs) to detect malicious activity in IoT logs.
- Achieved 89% accuracy in identifying threats in smart home environments using the OpenHAB platform.

# Enhancing Digital Twin Security through Partial Homomorphic Encryption

Oct 2023-Dec 2023

- Implemented the ElGamal cryptosystem to secure Digital Twin data, ensuring privacy while supporting secure computations.
- Built a proof-of-concept model for securely computing cardiac output, integrating MATLAB and Jupyter Notebook for encrypted data processing.

# **TEACHING EXPERIENCE**

#### **Rochester Institute of Technology**

Teaching Assistant – Introduction to Cybersecurity

Ian 2025-Present

- Guide students with weekly activities and assignments on key cybersecurity concepts such as network security, risk management, and system defense techniques.
- Grade assignments and provide constructive feedback for 50+ students, helping them strengthen their understanding of cybersecurity principles such as access controls, compliance laws, and regulations.

# **Rochester Institute of Technology**

Teaching Assistant – Cryptography and Authentication

Aug 2024-Dec 2024

- Designed 4 Python and Java assignments to test understanding of cryptographic concepts like Substitution Cipher, RC4, AC-5, and MD5.
- Graded assignments and provided detailed feedback to help students improve their implementation of cryptographic algorithms and secure coding practices.

#### PROFESSIONAL EXPERIENCE

#### Cognizant Technology Solutions, Chennai

Associate

Jan 2023-Aug 2023

- Automated API testing workflows using Selenium, reducing overall testing time by 30% and improving efficiency.
- Mentored 5+ new team members, improving team productivity through knowledge transfer and training.

# Cognizant Technology Solutions, Chennai

Programmer Analyst

Nov 2021-Dec 2022

• Developed and executed 50+ test cases (manual and automated) each release using Selenium in Eclipse IDE, ensuring software quality and collaborating with cross-functional teams to resolve critical defects.

# Cognizant Technology Solutions, Chennai

Programmer Analyst Trainee

Nov 2020-Nov 2021

• Contributed to 3+ mini-projects utilizing Selenium, TestNG, and Junit and gained real-time project experience.