

Aravindha Hariharan M

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OBJECTIVE

Enthusiastic graduate student specializing in the offensive aspects of cybersecurity, including penetration testing and ethical hacking. Possesses substantial theoretical and hands-on experience in diverse environments, ranging from government to private sector security challenges. Actively seeking an entry-level position to apply and further develop skills in offensive security strategies. Aims to contribute to an innovative organization that values cutting-edge security approaches and supports continuous learning, fostering growth as a proactive cybersecurity professional.

WORK EXPERIENCE

KOVAN TECHNOLOGY LABS, Pvt Ltd

Coimbatore, IN

Cloud Security and Infrastructure Engineer with Python expertise.

Feb 2021 – Dec 2022

- Collaborated with cross-functional teams to construct and oversee robust cloud infrastructure, utilizing Pulumi scripts for automated deployment. Implemented scheduled backups to ensure dependable data replication and swift recovery in case of disruptions.
- Proactively identified and rectified infrastructure vulnerabilities and deployment issues by conducting comprehensive analyses and implementing effective solutions.
- Functioned as a Python developer, creating efficient and sustainable software aligned with business objectives. Maintained a commitment to secure programming practices, ensuring adherence to industry best practices and coding standards.

GURUGRAM CYBERCELL

Remote

Cybersecurity Intern

Jun 2021– Aug 2021

- Participated in expert-led cybersecurity discussions, actively contributing to knowledge exchange and deepening understanding of emerging threats and defenses.
- Enhanced team ideation sessions by introducing insights from independent cybersecurity research, promoting innovative problem-solving approaches.

NOIDA POLICE CYBERCELL

Remote

Cybersecurity Intern

Sept 2020 – Dec 2020

- Conducted in-depth security analyses for government websites, identifying and documenting security breaches and vulnerabilities. Formulated and recommended strategies for risk mitigation and security enhancement.
- Acquired advanced knowledge and practical skills in cybersecurity, reinforcing expertise in ethical hacking and security analysis.

EDUCATION

UNIVERSITY OF MARYLAND

College Park, MD

Masters in Cybersecurity - Professional

Jan 2023 - Present

Cumulative GPA: 3.6/4.0.

Relevant Coursework: Hacking of C programs and Unix Binaries; Cloud Security; Networks & Protocol; Secure Operating System; Security Tools; Machine Learning Techniques Applied to Cybersecurity

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

Coimbatore, IN

Bachelor of Technology

Aug 2018 - Jun 2022

Major in Information Technology; Minors in Cybersecurity

Cumulative GPA: 9.34/10.0; RedHat Student Ambassador; Academic Excellence Award; Star Performance Award.

Relevant Coursework: Cryptography and Network Security; Distributed Systems; Open-Source Systems

CERTIFICATIONS

- Offensive Security Certified Professional (OSCP) – Offsec
- Certified Red Team Professional (CRTP)* – Altered Security
- Certified API Security Analyst (CASA) - Apisec University
- Certified Ethical Hacker (CEH) - EC Council
- Google IT Support Professional - Coursera
- Certified Network Security Specialist (CNSS) - ICSI
- ICSI Certified Network Security Specialist
- Programming For Everybody - Getting Started with Python - Coursera
- NSE 2 Network Security Associate – Fortinet
- ICS Cybersecurity Vulnerabilities - Cybersecurity and Infrastructure Security Agency
- Postman API Fundamentals Student Expert
- Certified Chaos Engineering Partitioner (CCEP) - Gremlin
- Bug Bounty Hunting - Offensive Approach to Hunt Bugs – HackersEra

ACCOMPLISHMENTS

- Identified and reported 8+ critical security vulnerabilities on Oracle Cloud, Bitwarden, TopCoders, SurfShark, and 5 additional platforms, contributing to enhanced overall system security.
- Executed 12+ responsible disclosure procedures for security vulnerabilities on Frappe, Maxiste, Jam-py, and other proprietary applications.
- Published 4+ Research papers on IEEE and International Conference and Journals.
- Contributed to 15+ Open-Source Projects for Security and Development
- Featured speaker at 5+ prestigious conferences, including RestCon 2020, Hac'KP 2020, and RootCon 2021.

PROJECTS

DARTH VADER

Mar 2023

Created a sophisticated Django-based suite with scheduled multithreaded submodules, including a Tor SOCKS proxy-equipped web crawler and OSINT tools for scraping dark web data, enabling the development of an intelligent dashboard for real-time monitoring of dark web drug markets.

Tools & Skills: Python with BeautifulSoup and Selenium, Tor, I2P, FreeNet, ZeroNet, VPN and Proxy with proxychains, Docker, Postgres

ENOLA HOLMES

Feb 2023

Sophisticated Tool to Scrape data from both surface and dark web with data analytics and prediction model.

Tools & Skills: Python with Selenium Grid & Pandas, AWS API Gateway, Decision Tree and KNN Classifiers

HAZE

Sept 2022

Domain and website information collection with advanced intel gathering and notification system.

Tools & Skills: Python, SQLite, DNSProxy, WebSocket, SMTP, Cloudflare Bypass

BUFFERSPLOIT

Mar 2022

Semi-automated buffer overflow exploitation tool based on Python with payload builder.

Tools & Skills: Python with PWN, Ghidra, Binary Ninja, GDB, Pwngdb, Immunity Debugger

OSINTSPL0IT

Aug 2021

A Comprehensive Open-Source Intelligence Information Gathering and Threat Monitoring tool. The tool is capable of drafting suspect profiles by collecting information available on the surface and deep web with deep machine learning models to analyze and predict the profile information.

Tools & Skills: IP2Location Database, FindandTrace, Social Media Scraper, PDF Report Generator, Nmap, Gobuster

BUZZARD

Mar 2021

Comprehensive C2 Server with the ability to deploy custom payload in supportive language.

Tools & Skills: Python Flask with MongoDB, Built-in interpreter, Payload server and listener, WebSocket, Scheduler, Metasploit with MSF Venom

COMPETENCIES

HACKATHONS

- Police Hackathon Challenge 2023 - Bengaluru
- Sainya Ranakshetram 2.0 - Indian Army Hackathon
- DevBhoomi Cyber Hackathon 2022 - Uttarakhand Police
- Darkathon 2022 - Narcotics Control Bureau
- Hacked to Hired 2021 - Crystal Delta
- Hac'Kp 2020 - Kerala Police Cyberdome

CAPTURE THE FLAG

- Embedded Security CTF 2022 - Finalist
- CyberRange CMD+CTRL - Thread Con 2022
- Nova CTF 2019, 2020, 2021.
- Avantaa 2020, Shaastra 2020
- OWASP Las Vegas, CIA Conference - CMDnCTRL

RESEARCH WORKS

- LSAF: A Novel Comprehensive Application and Network Security Framework for Linux - IEEE
- Honey Encryption Technique for Access Control in Public Cloud Environment - International Journal
- Buzzard: Post Exploitation Framework for Red Teamers - ICCSP
- Homeguard – Comprehensive Home Network Security System

ADDITIONAL

Technical Skills: Penetration Testing; Exploit Development; Network Security; Cryptography; Web Application Security; OSINT (Open-Source Intelligence); Scripting Languages (Python, Bash, PowerShell, JavaScript, TypeScript); Programming Languages (C, C++, Java); Forensic Analysis

Languages: Fluent in English & Tamil

Soft Skills: Time Management; Team Worker; Flexibility; Attention to details; Problem-Solving

Volunteering Experience: CTF Contributor - Nullcon Winja CTF, DEF CON, RedTeam Village, C0C0N, SCSH; Student Ambassador - RedHat Academy; Community Member - Nullcon, Axial, and SecArmy; Technical Lead Editor - HOPE Organisation, CBE