# RITVIK ARYA

## Education

University of Maryland

Master of Engineering, Cybersecurity

National Institute of Technology, Karnataka

B. Tech in Information Technology

Aug. 2022 - May 2024

College Park, MD

Aug. 2016 - June 2020

Surathkal, India

## Technical Skills

Languages: Python, Bash, C/C++, SQL, HTML/CSS, JavaScript

Technologies: Kubernetes, Docker, Gitlab, AWS SQS, SNS, EC2, Boto3, Git, Oracle, Hashi Vault, Kibana, Django Security Tools: Burp Suite, Metasploit, GDB, Ghidra, Wireshark, Amass, ZAP, OWASP tools, Nmap, DAST/SAST

Operating Systems: Ubuntu, Kali linux, Parrot OS, Windows, macOS

## Experience

HackerOne Oct 2021 – July 2022

## Product Security Analyst

Remote

- Successfuly analyzed and evaluated over 2,000 security reports from web, windows, and android platforms, utilizing CVSS standards to assess the potential impact. Presented a comprehensive and actionable summary of the findings to the client, delivering a thorough understanding of their security status.
- Mitigated high-impact security risks for more than 50 customers, including SQL Injection, IDOR, subdomain/account
  takeovers, and business logic errors, delivering comprehensive and effective solutions for complete resolution and risk
  mitigation.
- Implemented automation tools in bash and python to verify low level bugs, demonstrating technical proficiency and problem-solving skills in utilizing tools like Burp Suite, Waybackurls, and Nuclei.

## Application Engineer

Hyderabad, India

- Adeptly managed and developed high-performing, distributed, and fault-tolerant Python applications that efficiently migrated billions of rows of data across multiple relational databases, including Oracle, MySQL, and SQLServer.
- Improved data validation efficiency by 70% with the implementation of a quality-check service. The solution alerted developers of discrepancies and aided issue resolution with comprehensive logs.
- Streamlined code deployment across multiple environments through the use of Kubernetes, Docker, and GitLab CI/CD.

## Credit Suisse May 2019 – July 2019

#### Software Engineer Intern

Pune. India

- Developed a 'Single Page Application' utilizing Angular5, delivering a centralized and real-time monitoring solution for multiple services and APIs through a dashboard interface.
- Speeded up response times by 30% by retrieving results in JSON format and implementing multi-threading. Enhanced the client experience by adding features such as data filtering and grouping to multiple existing services.
- Worked on SCRUM and got acquaintance to different Agile software development methodologies.

#### **Projects**

## IP Log Hunter | Python, Git

• Developed a fast, Python command-line tool for locating specific IPs in Apache HTTP logs, with CIDR range mapping for advanced analysis during security incidents. The solution proved invaluable in analyzing intrusions.

#### Directory and subdomain enumerator | Bash

- Designed a highly efficient Bash tool that enables bruteforce directory paths and subdomains discovery for live domains.
- The tool analyzes response code and content length to verify the status and can retrieve paths for all the listed subdomains

## Certifications

Palo Alto Networks Academy Cybersecurity Foundation: Understanding of cybersecurity landscape, bot and ransomware attacks, threat modeling and digital forensics

AWS Fundamentals - Building Serverless Applications: Insights on AWS serverless architecture and its use across various services including AWS Lambda and DynamoDB

## Leadership / Achievements

- Top researcher for Teemill, reported 20+ critical issues on the platform
- Hall Of Fame for Fitbit, Cloudways Bug bounty programme on BugCrowd
- Participated in PicoCTF, CSAW and Google CTF