Shivasurya (Shiva)

✉ s5sankar@uwaterloo.ca | 📞 +1-(226) 581-4631

🏢 Waterloo, Ontario, Canada

Github: shivasurya
Linkedin: shivasurya
HackerOne: shivasurya
Google VRP: shivasurya

Software Engineer with more than four years of specialized work experience in development, security and ethical hacking. Currently seeking a challenging software engineering role focusing security in SaaS or enterprise products.

Work Experience

Software Engineer (Application Security), Yelp Inc

Jun 2021 - Present

- Improved secure development practices with shift-left security theme, by giving faster feedback to developers with **security tools** such as **static analysis and dependency checkers**.
- Reviewed technical & product specification for security audit and establishing best coding practices in the product feature.
- Designed and implemented security framework solutions to improve the resilience of Yelp login systems to large-scale attacks with captcha, bot signal, login signal implementations to prevent **account takeover attacks & intrusion detection** by heading the Login protections project.
- Managing AppSec related Bugbounty program by triaging & fixing security issues via Hackerone.

Software Engineer (Application Security), Zoho Corporation (zoho.com)

SaaS Products with 75+ Million customers including CRM, Mail, Books

Dec 2016 - Aug 2019

- Contributed to Zoho internal security firewall framework to prevent vulnerability & attacks in real-time including mitigation of OWASP ASVS Standard.
- Lead Mobile security team and contributed to continuous mobile security static code analysis to mitigate issues in mobile apps and Zoho Android & iOS SDK frameworks.
- Adopted industry wide AES Encryption practice for Zoho Invoice and Books Payment feature while integrating with payment terminals & banking integrations.
- Found 100+ vulnerabilities across Zoho, ManageEngine products including Multi factor authentication bypass, Remote code execution.
- Managed Zoho Bugbounty program by triaging, fixing security issues & rewarding security researchers with financial bounty.

Education

University of Waterloo, Canada

Computer Science, Sep 2019 - May 2021

Thesis: DEVAA - Automated approach to detect vulnerabilities in Android Apps

Security Contributions

- **CVE-2018-16493 -** Found directory traversal leading to internal file access attack in an npm package
- Found security issues in Google, Microsoft, Dropbox, Twitter, Zendesk and more via Hackerone platform.
- APKTool Remote Code Execution via Zip Slip - reported to opensource and fixes are here

Programming Languages: Java, NodeJS, GoLang, SQL, JavaScript

Technologies and Frameworks: Android, Reactjs, Docker, RabbitMQ, Redis, Cassandra, OSCP Tools, Static Analysis, CodeQL, OWASP ASVS, Mitre Attack Matrix, Semgrep, AWS, GCP

Special Interest: Learning chromium browser security, Biking.

Awards

Smart India Hackathon Winner (Security) + Internship @ISRO (Indian Space Research Organization) Govt. of India   **Apr 2017**