

Saiteja Chodavarapu

saiteja.ch1998@gmail.com | +1 (412)-983-9788 | Pittsburgh, PA
Github: saitejach1998 | LinkedIn: saitejach1998 | Personal: saitejach1998.github.io

EDUCATION

CARNEGIE MELLON UNIVERSITY

MS IN INFORMATION SECURITY
August 2021 - Present | Pittsburgh
QPA: 3.94

AMRITA SCHOOL OF ENGINEERING

B.TECH IN COMPUTER SCIENCE
July 2016 - July 2020 | India
Cum. GPA: 9.09 / 10.0

COURSEWORK

GRADUATE

Intro to Computer Systems
Intro to Information Security
Network Forensics
Applied Information Assurance
Fundamentals of Telecom Networks

UNDERGRADUATE

Cryptography
Computer Networks
Operating Systems
Neural Networks

SKILLS

PROGRAMMING

Most Experience with:
JavaScript, Python, Java
Some Experience with:
C, C++, Bash, C#, SQL
Familiar with:
Assembly, Go, PHP

TOOLS AND FRAMEWORKS

ELK, W3AF, Metasploit
Security Onion, Electron, Suricata
PwnTools, Burp Suite, Volatility

AREAS OF INTEREST

Application Security
Network Security
Zero Trust Networking
Security Automation
Digital Forensics
Reverse Engineering

EXPERIENCE

INSTASAFE TECHNOLOGIES PVT. LTD. | SECURITY RESEARCH INTERN November 2020 - July 2021 | Bengaluru, India

- Created white-papers detailing the architecture and working of Instasafe's Zero Trust Products.
- Performed rigorous Penetration testing on the company's Zero Trust infrastructure, both on an architectural and implementational level.
- Performed pentesting on Web and Mobile applications owned by Instasafe's clients. Contributed significantly to a team which designed and created an automated framework for finding trivial vulnerabilities. Reported several critical vulnerabilities including XSS, SQL Injection, Broken Access Control vulnerabilities etc.

INSTASAFE TECHNOLOGIES PVT. LTD. | INTERN April 2019 - June 2019 | Bengaluru, India

- Worked on the ELK Stack, used various monitoring and fingerprinting tools.
- Created a standalone monitoring service and pipeline for the company's Zero Trust Platform, providing real-time data and alerts in case of an intrusion.

AMRITA TECHNOLOGIES | APPLICATION DEVELOPMENT INTERN Nov 2017 - Apr 2018 | Coimbatore, India

- Created a windows application to aid in the digitizing of X-rays in hospitals using the WinForms library.
- An integrated system consisting of this application was used by government hospitals to provide diagnosing facilities in remote places.

PROJECTS

MODIFIED MDNS FOR ACCESS CONTROL

Created a **modified implementation** of the mDNS protocol to **provide access control** features to services which do not support multiple users simultaneously. This feature prevents users from getting kicked off Chromecast devices if they're still using the device.

AUTOMATED PENTESTING OF ANDROID APPS

Built a GUI-based application to **automate the static and dynamic analysis** of native **android applications** to test for possible vulnerabilities. Successfully **detected and exploited SSL pinning bypass** in modern applications like Twitter.

ANTI-PHISHING BROWSER PLUGIN

Created an **anti-phishing browser plugin** that uses **Phishtank's** database to tag websites as harmful. The plugin then **defangs** their URLs in the source to prevent misclicks to malicious URLs.

FORENSIC ATTACK-DEFENCE SIMULATION

Performed a **multi-stage real world attack** and detected it using network artifacts like **firewall logs** and **packet captures**. Used Snort and Wireshark to capture and analyze evidence relating to the attack

OPENID AND OAUTH USING KEYCLOAK

Built a **lab to teach** students how modern **web applications** are secured with **OAuth and OpenID** using the Keycloak framework.