

Syed Mohammad Ibrahim

ibrahim.work@proton.me | iamibi.app.link/linkedin | iamibi.app.link/github | iamibi.app.link/quora

EXPERIENCE

NVIDIA Corporation

Adelphi, USA

Information Security Analyst Intern

May 2022 – Aug. 2022

- Implemented Security Control Automation Framework
- Developed a process for code development and quality assurance
- Assisted with Compliance Monitoring and Reporting

Fraunhofer Center Mid-Atlantic (CMA)

Adelphi, USA

Software Engineer Intern - Part Time

Jan. 2022 – May 2022

- Worked on developing REST API's for backend using Flask
- Implemented the architecture to interact with AWS Dynamo DB using Python's Boto 3 library
- Used PyTest to perform unit and functional testing for the application
- Implemented AWS Cognito login authentication on server side

Poshmark

Chennai, India

Senior Software Engineer - I

Apr. 2021 – Aug. 2021

- Worked on building the infrastructure for the Milestone project with the help of utilities like RabbitMQ, MongoDB, and Sidekiq
- Branch.io deep linking and universal linking enhancements
- Worked on upgrading static code linter - Rubocop

Software Engineer - II

Jul. 2020 – Mar. 2021

- Migrated AppsFlyer SDK triggered tracking events to GTM based tracking events on iOS
- Implemented OAuth 1.0 and OAuth 2.0 protocols for connecting external services like Pinterest, Twitter, Tumblr, etc
- Improved the effectiveness of RSpec test cases by migrating to the new "expect" syntax from the "should" syntax
- Worked on implementing the shipping promo feature for guest checkout flow

Software Engineer - I

Nov. 2018 – Jul. 2020

- Migrated the code for Ad Partners tracking from Server to Google Tag Manager (GTM)
- Enhanced the Posh Influencer and Posh Ambassador programs along with the usage of Cron Jobs
- Built the infrastructure for generating Image Sitemaps for indexing

Tata Consultancy Services

Chennai, India

Assistant System Engineer

Jul. 2018 – Nov. 2018

- Developed search functionality for the client's enterprise iOS App
- Built the native iOS unit testing framework to perform Test Driven Development (TDD)

Assistant System Engineer - Trainee

Aug. 2017 – Jul. 2018

- Trainee in Automation and Manual testing.
- Worked on various kinds of test suites like selenium, HP Quick Test Pro, etc
- Learned Swift 4 as part of the iOS development project that I was assigned to

PROJECTS

Avionics Dash Server | Python, Flask, MongoDB



- Developed the backend for Avionics Dash using Flask REST API's
- Deployed the application on <https://app.koyeb.com> for client access
- Implemented security features like password hashing, session based authentication using JWT, and more
- Configured CI/CD pipelines for robust development and response

Secure Code Review



- Performed Secure Code Review on Open-Source Project Sonarr
- Wrote a report on the Common Weakness Enumeration's (CWE's) found during the review
- The Report outlines all the tools used in complement with the manual code review process.

Secure Web Application | .NET Framework 4.7



- Worked on attacking and defending the Webgoat.NET application
- Reported Common Weakness Enumeration (CWE) for all exploits performed as an attacker
- Secured the application for respective CWE's with best practices as a developer

Penetration Testing | MySQL, Ubuntu 14.04, Windows 7 SP 1, Windows Server 2016, Wordpress Website

- Performed penetration testing on various applications and operating systems
- Exploitation techniques involved, but not limited to, Cross-Site Scripting (XSS), SQL Injection, MS17_010 Eternal Blue, Cowroot, Privilege Escalation, Buffer Overflow, etc.
- Used Open Source Intelligence (OSINT) for reconnaissance and identifying attack vectors
- Few of the tools involved in the process are NMap, Searchsploit, Metasploit, Hashcat, Burp Suite, etc.

Full List of Projects



EDUCATION

Master of Engineering in Cybersecurity (3.8/4.0)

College Park, USA

University of Maryland, A. James Clark School of Engineering

Aug. 2021 – Dec. 2022

Coursework:

- Introduction to Secure Coding
- Hacking of C Programs and Unix Binaries
- Security Tools for Information Security
- Digital Forensics and Incidence Responses
- Cloud Security
- Penetration Testing
- Secure Operating Systems
- Network Security
- Software Implementation and Design
- Introduction to Machine Learning

Bachelor of Engineering in Computer Science (7.54/10.0)

Bhopal, India

RGPV University, Lakshmi Narain College of Technology and Science

Jun. 2013 – May 2017

TECHNICAL SKILLS

Languages: Ruby, Python, C/C++

Frameworks: Ruby on Rails, Cucumber, RSpec, XCode Test Suite, Flask

Databases: MongoDB, Amazon Redshift, AWS Dynamo DB

Developer Tools: Git, Vagrant, Google Tag Manager

Network & Pentesting Tools: Hashcat, Burp Suite, AFL, NMap, Hydra, Dig, Searchsploit, Wpscan, Metasploit, Wireshark, Nessus

LEADERSHIP AND ACTIVITIES

Bit Camp, Hackathon

College Park, MD, USA

Mentor

Apr. 2022

Primary responsibility involved assisting the hackers in unblocking their technical road blocks by providing insights on their desired tech stack

Technica, Hackathon

College Park, MD, USA

Mentor

Nov. 2021

Mentored at the hackathon for under-represented genders and helped out participants with their projects and ideas

Rotaract Club of East Kolkata

Kolkata, India

Participant

Jul. 2020

This is an NPO that works for the welfare of society and participates in social activities like educating the underprivileged, raising funds, etc. I participated in one such activity where they were raising funds for the needy by organizing an excel workshop for a nominal charge

EXTRA-CURRICULAR ACTIVITIES

- **Professional Learning:** Studied multiple courses from various MOOC platforms like Coursera and edX under domains like Cybersecurity and Programming.
- **Sports:** Ran a 10km marathon organized by Decathlon - Run for your loved one.