

Syed Mohammad Ibrahim

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

EDUCATION

Master of Engineering in Cybersecurity (4.0/4.0)

College Park, USA

University of Maryland, A. James Clark School of Engineering

Aug. 2021 – Dec. 2022 (Exp.)

Coursework:

- Introduction to Secure Coding
- Hacking of C Programs and Unix Binaries
- Security Tools for Information Security
- Penetration Testing
- Secure Operating Systems
- Network Security

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

PROJECTS

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.

Employee Management System | ASP.NET Core, C#, Microsoft Security Libraries, MongoDB



- A portal for managing employees with primary focus on security details
- Implemented logging, password hashing and salting, AntiXss Sanitization and Sessions as part of the project
- Areas covered in the project are Input Validation, Cryptography, Authentication & Authorization, Session Management, Error Handling, Logging and Debug

Full List of Projects



EXPERIENCE

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
- Revamped the whole external partner's infra for readability and removed redundancy for ease of understanding
- Worked on migration of the Share Settings page on the web from Rails to Vue.js and respective APIs

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
- Participated in the Hacktoberfest 2k18 and created multiple open-source pull request changes to different libraries

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

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, Docker, Vagrant, Google Tag Manager, Jenkins

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

July 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

RAAHAT, Be The Change Maker

Bhopal, India

Volunteer

Sep. 2013 – Apr. 2014

Volunteered for various events related to child welfare and helping out senior citizens at Old Age homes

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.