

Syed Mohammad Ibrahim

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EDUCATION

Master of Engineering in Cybersecurity (4.0/4.0)

University of Maryland, A. James Clark School of Engineering

College Park, USA

Aug. 2021 – May 2023 (Exp.)

Coursework:

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

Bachelor of Engineering in Computer Science (7.54/10.0)

RGPV University, Lakshmi Narain College of Technology and Science

Bhopal, India

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

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
- Participated in Game Hackathon organized by Poshmark where the goal was to create a small game with a team

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
- Migrated the usage from bit.ly generator service to branch.io service for generating short URLs
- Participated in the Hackathon organized by Poshmark to work as a team and built a Chatbot using Dialogflow and Crickinfo API
- 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

- Part of TCS Interactive, a research-based unit
- Developed search functionality for the client's enterprise iOS App
- Hosted a tech session for the team on Django as a development framework
- Upgraded the iOS App with new models and designs as per the client's requirement using Swift 4
- 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
- Worked on Front-end development as the final project for the training
- Learned Swift 4 as part of the iOS development project that I was assigned to

TECHNICAL SKILLS

Languages: Ruby, Python, C/C++, Swift

Frameworks: Ruby on Rails, Node.js, Cucumber, RSpec, XCode Test Suite

Databases: MongoDB, Amazon Redshift

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

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.