Syed Mohammad Ibrahim

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EDUCATION

Master of Engineering in Cybersecurity (4.0/4.0)   College Park, USA
University of Maryland, A. James Clark School of Engineering   *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)   Bhopal, India
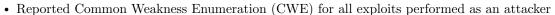*RGPV University, Lakshmi Narain College of Technology and Science*   *Jun. 2013 – May 2017*

PROJECTS

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

Blowfish Cipher | *Python*
- Minor project on analysis and implementation of blowfish cipher for password encryption
- A terminal based program that accepts a password as input and saves it as a cipher text in a file

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

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.