ASIM IKRAM

@ asim.ikram1@outlook.com   📞 +92-336-5467116   in Asim Ikram   📍 Islamabad, Pakistan

PROFESSIONAL EXPERIENCE

Research Associate
National Center for Cyber Security

📅 Mar 2020 – July 2021   📍 Islamabad, Pakistan

- Designed and implemented code architecture
- Wrote asynchronous server side code using socket.io
- Performed analysis on the extracted data and added interactive plots to show the analysis
- Wrote automated test cases (using UI Vision RPA)
- Set up code integration and deployment. Wrote an installer package (.deb) for Linux based systems using debconf. Implemented a method that would only allow the code to run only when a provided USB flashdrive was inserted into the system.
- Coordinated tasks between group members using JIRA and set up integrations to the repository for easier task tracking, management and time-saving.
- Conducted technical interviews and helped new members get onboard with the project
- **Tools and Technologies:** Python, Flask, Javascript/JQuery, Linux, debconf, JIRA, Bitbucket

Research Assistant
National Center for Cyber Security

📅 Mar 2019 – Mar 2020   📍 Islamabad, Pakistan

- Developed a software for Android forensics
- Wrote code to get a physical copy (iso) of an Android device
- Wrote backend code to extract and parse data from an extracted image. Each part could work standalone and could easily be called using REST API calls
- Used ORM to communicate to data stored in databased
- Wrote front-end code to display extracted data
- **Tools and Technologies:** Python, Flask, Javascript, JQuery, Linux

Software Design Engineer
Xflow Research Inc.

📅 Jul 2018 – Mar 2019   📍 Islamabad, Pakistan

- **Virtual BNG:** Studied and implemented the PPPOE and LCP protocols. Also tested the protocols using the rp-pppoe client. Both versions of the code were written such that they could be easily extended.
- **Tools and Technologies:** Golang, Linux
- **Virtual BRAS:** Implemented a central command line interface to manage virtual machines. Wrote a deployment script to automatically install the tool on the required system. Helped the testing team by running the provided unit test cases as well as reporting and fixing bugs.
- **Tools and Technologies:** Python, Bash, Linux

SKILLS

Python   C\C++   Javascript\JQuery   Latex   Linux
Git/Github

EDUCATION

Master of Computer Science
CGPA: 3.77/4.00
National University of Computer and Emerging Sciences

📅 Aug 2016 – Jun 2018   📍 Islamabad, Pakistan

Bachelor of Computer Science
CGPA: 3.30/4.00
National University of Computer and Emerging Sciences

📅 Aug 2012 – Jun 2016   📍 Islamabad, Pakistan

PUBLICATIONS

Authorization Policies Specification and Consistency Management within Multi-Cloud Environments – NordSec 2018

AMclr - An Improved Ant-Miner to Extract Comprehensible and Diverse Classification Rules – GECCO 2019

SEMESTER PROJECTS

DNS Spoofing
- A DNS spoofer that consisted of setting up a DNS server and redirecting a user to a fake website.
- **Tools and Technologies:** Python, Scapy, Bind9.

Distributed Password Cracking System
- A system that used concepts of distributed systems to crack a password.
- **Tools and Technologies:** Golang, Atom

GPU Cache Bypassing
- A code that automatically modified Nvidia PTX code to include cache bypasses to improve GPU cache performance.
- **Tools and Technologies:** Java, Nvidia Visual Profiler, Nvidia Geforce GT 630m.

CodePlay
- A tool that automatically converted code written in Java to C# and vice versa.
- **Tools and Technologies:** Java, C#.

AWARDS

- Gold Medalist in MS (CS)
- Multiple time Dean's list award holder