Muhammad Firhard Roslan

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Profile

I am a full-time research student at the University of Sheffield currently in the first year. I will be working in the area of software testing focusing on fuzzing.

EDUCATION

University of Sheffield

Sheffield, UK

PhD. in Software Testing

January. 2021 - Ongoing

Mobile: +447300407893

- o Research Area: Fuzzing, Mutation Testing, Search-Based Testing
- Areas of Interest: Improving propagation of fuzzers to find faults, Evaluating NoSQL schema using fuzzing techniques, NoSQL schema integrity.

University of Sheffield

Sheffield, UK

Master of Science in Software Engineering; Grade: Distinction

 $September\ 2017-September\ 2018$

Email: firhardLaMars@gmail.com

o Courses: Testing and Verification, Agile Development, Cloud Computing, Software/Hardware Verification.

University of Nebraska-Lincoln

Lincoln, Nebraska, USA

Bachelor of Science in Computer Engineering; GPA: 3.431/4.000

August 2014 - May 2017

- o Courses: Electrical Circuits, Computer Architecture, Cryptography, Database, Data Structure & Algorithm
- $\circ\,$ Dean's List: Fall '14, Fall '15 and Fall '16

EXPERIENCE

Oracle Corporation Malaysia

Kuala Lumpur, Malaysia

Software Engineer

May 2019 - December 2020

- Full Stack Developer: Working as a full stack software developer using Oracle JET framework for front-end, Spring Boot for the back-end, and Oracle Database for storing data. Following the right Software Principles.
- Sustaining Engineer: Maintaining legacy system particularly related to Oracle Database and payment transactions.

The OAK Group, University of Sheffield

Sheffield, UK

Research Software Engineer

September 2018 - January 2020

- Full Stack Developer: Full stack NodeJS web developer focusing on real-time video chatting using SocketIO and WebRTC, storing information in MongoDB, handling deployment of NodeJS
- Android Developer: Develop native Android application that would communicate with NodeJS for video chatting.

Cybersecurity Malaysia

Kuala Lumpur, Malaysia

Internship

September 2018 - January 2020

- Security: Analyze statically and dynamically vulnerabilities on a website.
- Software Principle: Learn good security development standards and practices.

University of Nebraska-Lincoln

Lincoln, Nebraska, USA

 $\label{lem:condition} \textit{Undergraduate Teaching Assistant for } \underline{\textit{Embedded System Module}}$

January 2016 - May 2016

- Teaching Assistant: Assisted students with the task at hand and grading, held consulting hours for students.
- Lab Assistant: Help students related to Arduino and most of the sensors.

ACCOMPLISHMENT AND AWARDS

- MSc. Dissertation (with Distinction): Ridesharing for Self Driving Car: Focus on the scheduling of the self-driving car, shortest path optimization. Firebase as web service, Graphhopper as routing engine, OpenStreetMap as the web mapping service.
- NIMBUS Lab: Served as a web developer (back-end) on Extensible UAV Interface for Nebraska Intelligent MoBile Unmanned Systems (NIMBUS) lab for senior design project
- Honer Society: Tau Sigma Honor Society, University of Nebraska-Lincoln
- Scholarship Awarded: Global Ambassador Scholarship Award, University of Nebraska-Lincoln (2014 2017) & MARA GrEP PhD Program, Malaysian Government (2021 2025)

Programming Skills

- Languages: JavaScript, Java, Ruby, C, No-SQL, SQL, currently learning Go
- Technologies: React, Oracle-JET, MongoDB, SQLite, Git, Firebase, VS Code, Socket IO, IntelliJ, Eclipse