Muhammad Firhard Roslan

https://www.linkedin.com/in/firhardroslan/

Email : firhard@gmail.com

Mobile : +447310407893

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*
- **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*
- **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*
- **Courses**: Electrical Circuits, Computer Architecture, Cryptography, Database, Data Structure & Algorithm
- **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
Undergraduate Teaching Assistant for 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