MUHAMAD HARITH ARASH

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TECHNICAL SKILLS

- Programming: Java Spring Framework, C, C++, Python, Angular & ReactJS, HTML, CSS, JavaScript, NodeJS & Typescript, OpenMP & MPI
- Databases: PostgreSQL, MariaDB, MySQL and SQL Server.
- Miscellaneous: Windows, Linux OS, Docker, Git, Kubernetes, AWS EC2, Google Cloud, Bash.

EDUCATION

September 2022 – August 2023

Master of Computer Science, University of Warwick, United Kingdom

- Predicted a 2.1: Key modules include: <u>Natural Language Processing</u>, <u>Image & Video Analysis</u>, <u>High-Performance Computing</u>, <u>Foundation Data Analytics</u> & <u>Data Mining</u>, Advanced Computer Security
- Dissertation Project: High Performance Computing with Monte Carlo Simulation (C++).

August 2016 - January 2020

Bachelor of Science (Physics) with Distinction, University of Malaya, Malaysia

- Key modules include: Computational Physics, Numerical and Computational Methods, Biocomputing
- Dissertation Project: Simulation of Nuclear Transmutation Process with Geant4 (C++).

WORK EXPERIENCE

Servedeck Innovation Sdn Bhd - Kuala Lumpur, Malaysia

Full-stack Software Developer - (Asset Management System)

Nov 2021 - Sept 2022

- Created an efficient module for managing client licenses, facilitating streamlined subscription handling for the internal team.
- Assigned user roles and permissions within the system.
- Implemented new features and resolved user-reported or tester-detected issues.
- Conducted thorough testing and debugging to identify and fix code errors.
- Developed multiple APIs to handle requests from web and mobile applications.
- Utilized GitLab for code management and collaboration with fellow developers.

Skills:

- Proficient in Angular for front-end development and Java Spring Framework (with XML) for back-end and database management.
- Skilled in designing new relational database structures.
- Utilized CSS libraries (Angular Bootstrap, Angular Material, Angular Flex-Layout) to create responsive websites.
- Proposed effective code management strategies to ensure clarity and prevent confusion in the future.
- Translated designs from Figma Design Tool into website development.
- Proficient in using Jhipster IDE for easy application deployment.
- Collaborated with other developers to enhance the user interface, resolve bugs, and improve application performance.

Achievements:

- Independently designed and developed a significant module integrating it into all business features of the web application, minimizing client risks.
- Quickly adapted to a new business environment and demonstrated early proficiency in coding.
- Recognized as one of the top-performing employees in the company.

Prima Health System Sdn Bhd - Kuala Lumpur, Malaysia

Full-stack Software Developer – (Medical Imaging System)

Aug 2020 - Nov 2021

- Developed a software to integrate with hospital HIS system and PACS for managing medical image data through Radiology Information System.
- Maintained and upgraded web application via Angular Framework, ReactJS, and Java Spring Boot.
- Utilized external open-source libraries such as Cornerstones, VTKJs for 2D medical image data to 3D visualization.
- Researched, designed, and organized multiple software programs.
- Performed QA inspection and identified any features in the existing system to enhance, proposing ideas for upgrades.
- Deployed compiled products via Putty Terminal and Docker containers.
- Implemented Gitlab workspace environment for updating features and fixing issues.
- Demonstrated a fundamental understanding of Cloud Native Application Architecture, including the usage of the Amazon EC2 Console, for effective cloud management.

Top Glove Corporation (Internship) - Selangor, Malaysia

Quality Assurance Researcher

July 2019 - Oct 2019

- Served as a Trainee Quality Assurance Researcher, contributing to the development of a software solution for more efficient and flexible inspection data collection.
- Built a platform (Google Form) to standardize data collection using QR codes and a mini app for easy launch on workers' phones. Collaborated with engineers to provide data analysis for report issuance.
- Followed quality standards and procedures to minimize errors and maximize test quality.
- Assisted engineers in performing QA testing, including executing QA tests and collecting and compiling test data.

PROFESSIONAL SIDE PROJECTS

Simulation of Nuclear Transmutation

Statistical predictive behavior of nuclear transmutation process

- Constructed and developed a model for the nuclear interaction of gases using C++ language and CERN Geant4 package manager.
- Built and designed code to execute an open-source simulation software in Linux OS.
- Predicted and visualized data of interaction using Python ROOT-Data Analysis Framework.
- Collected data and applied predictive patterns using Python with external scientific methods.

Web Development (ReactJS)

- Developed a small project using languages such as ReactJS to create a front-end application.
- Split every input character based on vowel, consonant, number, and special characters.
- Handled basic database operations with MySQL.
- Linked the architecture with the database, such as PostgreSQL.

Data Analysis (Python)

- Completed a small analysis project using police brutality cases data that occurred in the United States.
- Utilized Jupyter notebook as a workspace for data presentation and providing insights into the number of cases occurred.
- Utilized external libraries such as folium, pandas, NumPy to map every data point to geographical data.
- Provided an overview and interactive visualizations for viewers.

Quant System Development

- Developed the data analysis system using Python.
- Predicted the probability of an option to be in-the-money or out-of-money using the analytics.
- Modelled and forecasted the underlying stock price return using ARIMA Model.
- Implemented the prediction as a basis using R-language.

INTERESTS

- Travel and Exploration
- Technology and Innovation

Reading and Personal Development

REFERENCES AVAILABLE UPON REQUEST.