Harith Al-Safi

Electronics and Computer Engineer

About me

An engineer with a great enthusiasm towards data science and Artificial Intelligence. I post regular workout and nutrition contents. Am quite fervent about blockchain, trading and investment.

Experience

Robot Engineer Robot fight league Mov 2023 - Mar 2024

₽ Leeds, UK

- Led a team to create a data science web app using Python Django, and Matlab for data analysis
- Supervised UI/UX designers on Figma designs whilst managing the developers

Frontend Developer

math Aug 2023 - Dec 2023

Remote

Velz Travel

- Led a team to create a data science web app using Python Django, and Matlab for data analysis
- Supervised UI/UX designers on Figma designs whilst managing the developers
- Won multiple awards for the final delivery

Software Engineer (Placement Year)

July 2022 - July 2023

Johnson Controls R&D department (JCI)

- _____ **V** London UK
- Administered legacy C/C++ projects whilst fixing bugs and adding new features
- Developed C# .NET library on serial data analysis generation for embedded system programs
- Designing analytics web dashboard with React JS and using TensorFlow for predictive AI
- Lead 10 interns to create a full business pitch and ended up placing 2nd amongst 18 competitors

Software Developer Freelance

₩ Nov 2021 - Feb 2022

Paperound

__ **♀** Leeds UK

- Developed a book library management system in C
- Designed Python NumPy, SciPy and Scikit-learn scripts for neural networks and data visualization
- Programmed PowerShell and bash automation scripts for system administration

IT administrator

Jun 2020 - Mar 2021

Mesopotamia Group

Amman Jordan

- Collaborated with a team to build a local file server on Ubuntu 18.04 LTS built using Apache and Nextcloud
- Administered the system using Bash, PowerShell and Nmap with SSH tunneling and port forwarding
- Engineered a complex version using a raspberry pie, network interface card and attached storage.

Education

BEng (Hons) in Electronics and Computer University of Leeds (UoL)

m Sept 2019 - June 2024

▼ First-Class Honors

- Embedded systems, Microprocessors, FPGA, Circuit Analysis, Signal processing, Networking, Compiler design
- Cloud and Parallel computing, Secure and Distributed systems, Cybersecurity, Software Engineering, Research

🚨 Skills



Soft: Hard-working Motivated Deterministic Leadership Communication Problem solver

- Re-designed a legacy CLI project to a GUI with C# .NET WPF using MVVM and multithreaded design
- Invented an object-oriented scripting language with a custom compiler and runtime memory access.
- Integrated SQLite database, Excel I/O features, analysis tools and serial communication protocols
- Communicated with engineers to get a feedback loop on the app's design and features

MCPP

Apr 2021 - Ongoing

Personal

¶ JCI

- Created a cross-platform math library for C++
- Engineered with DevOps using Travis-CI, testing with GoogleTest and building with Docker Cmake
- Incorporated numerical algorithms revolving around matrix algebra, statistics and machine learning.
- Documented using Doxygen and MkDocs

NotePad

Mov 2021 - Ongoing

Personal

- Programmed a cross-platform note app with Flutter
- Established backend using cloud authentication services with Firebase and storage with SQL CRUD
- Using the BLoC pattern for state management and the Provider package for dependency injection
- Used KerasRL library for reinforcement learning with human feedback to predict user's next note

Home Automation Embedded System

🛗 Jan 2021 - May 2021

¶ UoL

- Engineered circuits for I/O functionality using data sensors, potentiometers, buttons and resistors.
- Programmed control system for home appliances such as temperature, air conditioning and lighting
- Developed mini-OS using LCD display and joystick
- Operated on STM32 board, C++ on an ARM MCU

Professional Courses

Data Analysis with Python

₩ Oct 2021

- Develop Python code for cleaning and preparing data for analysis
- Perform exploratory data analysis and analytical techniques to datasets using Pandas, Numpy and Scipy
- Manipulate data using dataframes, understand data distribution, perform correlation and create data pipelines
- Build and evaluate regression models using machine learning scikit-learn for prediction and decision making

Databases and SQL for Data Science with Python

- Analyze data within a relational database on the cloud using IBM DB2, SQL, Python
- Construct SQL CRUD operations and compose views, transactions, stored procedures and joins.

Python for Data Science, AI & Development

- Demonstrate proficiency in using Python libraries such as Pandas, Numpy, and Beautiful Soup
- Access web data using APIs and web scraping from Python in Jupyter Notebooks.

Data Science Methodology

♀ Remote

- Apply the six stages in the Cross-Industry Process for Data Mining (CRISP-DM) to analyze a case study.
- Evaluate which analytic model is appropriate among predictive, descriptive, and classification models used.

👺 Extracurricular

Lablab

Event Coordinator Volunteer

IEE RAS ICRA

Web Developer hackathon

Royal Hackaway v6

Game Developer hackathon

Pygames hackathon Microsoft

Al Agent hackathon

© Nov 2021 - Feb 2022

Pygames hackathon Microsoft

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