Dhivya Ravindran

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EDUCATION

Imperial College London

MEng Computing (Artificial Intelligence)

On track for a 1:1

Oct. 2018 – July 2022

Kolej Yayasan UEM, Malaysia

A Levels

4A*s: Mathematics, Further Mathematics, Physics, Economics

July 2016 - June 2018

Work Experience

Tech Development Team Lead $\mid AGORAx$

July 2020 - Present

- Developed first iteration of the media publishing platform using Wordpress
- Managing a team researching and developing the second iteration of the platform as a full stack Cross-Platform Application using a Flutter/Dart tech stack.

Technology Intern | SK Sunbelt Solutions and Supply

July 2020 - Sep 2020

- Created script to automate report generation for data analysis.
- Developed programs written in Python to forecast demand of items, predict lead time, and used these models to flag high priority or high delay items for the logistics company.
- Set up an Item Quality Control database using Microsoft Excel and VBA.

Executive, Branding and Strategy Office | GenCorporate

Oct 2018 - May 2019

- Advised representatives of companies on the organisation of recruitment events for incoming Malaysian graduates.
- Produced visuals and marketing materials to advertise recruitment events using Adobe Illustrator, and maintained the organisation website.

PROJECTS

COVID-19 Volunteer Web Application | HTML, CSS, React, Node.js, MongoDB, Heroku

- \bullet Developed a full stack Web Application with the MERN stack and deployed on Heroku, for connecting volunteers to at risk groups
- Designed in an iterative process using regularly collected feedback from users.

Optimising WACC Compiler | Java, ANTLR, Python, Ruby

- Built full WACC compiler including parsing, semantic analysis, code generation, and optimisation.
- Implemented continuous integration with *Docker*, using *Python* and *Ruby* to automate testing.
- Optimised the compiler by implementing Control Flow Analysis and Array Bounds Checking, extended the language to support type inference and classes.

Implementing support for Pintos Operating System $\mid C$

 Implemented scheduling, user programs and added virtual memory implementation for an operating system framework of the x86 architecture.

ARM Project $\mid C, ARM$

- Developed an assembler and emulator for the ARMv6 instruction set.
- Developed a basic abstraction of the crossyRoad game which was adapted to the gpio of a Raspberry Pi.

TECHNICAL SKILLS

Proficient: Java, Python, C/C++, JavaScript, HTML/CSS, Haskell **Intermediate**: Prolog, SQL(Postgres) **Exposure**: Kotlin, Ruby, Scala

VOLUNTEERING

Teacher | LifeBridge Refugee Home

July 2018 – Present

- Formulated a group of university students to teach children of age groups 7-11 and 14-17 Science, Maths and English throughout the summers of 2018 and 2019.
- Developed relationships and continued to support this community through organising initiatives to support the students and their families during the COVID-19 pandemic.