Khayle Torres

37 Kilross Road, TW14 8SB London, United Kingdom torreskhayle@gmail.com 07474093736
https://www.linkedin.com/in/khayle-torres-6951011bb/ github.com/kt1719

Education

MEng Electrical and Information Engineering 09/2019 – present
Imperial College London London, United Kingdom
- Currently average a 1st in Second Year
- Module of Interest (Y3): Machine Learning, Artificial Intelligence, Operations Research
- Modules of Interest (Y2): Information Processing, Discrete Maths (Complexity Theory in Programming), Control Engineering
- Modules of Interest (Y1): Digital Electronics and Computer Architecture, Programming for Engineers (C++)

A Levels 09/2017 – 06/2019
St Pauls Catholic College London, United Kingdom
- Further Maths - A
- Maths - A*
- Physics - A

Projects

MARS Rover Project 05/2021 – 06/2021
- Combines multiple subsystems in order to make a fully autonomous Rover that can detect objects, send encrypted data to and from a server, and be controlled remotely using distance calculations or remote control
- https://github.com/sts219/Debonair

Intel DE10-Lite FPGA Game 02/2021 – 03/2021
- Created a game that can be played remotely using a DE10-Lite board as the controller
- Uses TCP/IP, Unity, Quartus, AWS and multiple languages to allow the game to work.
- https://github.com/sts219/World_of_DE10s

C to MIPS Compiler 02/2021 – 03/2021
- Lexer designed from scratch, Parser heavily influenced by ANSI C Parser
- Uses Flex, Bison, Make and C++ for the contents
- https://github.com/kt1719/C-to-MIPS

MIPS CPU 11/2020 – 12/2020
- Created two CPUs that follows the MIPS architecture specification (Revision 3.2). Asynchronous and Synchronous
- Avalon compatible memory interface
- the Synchronous CPU is built using the Asynchronous CPU and a wrapper
- https://github.com/xw2519/ISA-MIPS-coursework

Neural Networks
- Created a Neural Network in Python that would be able to perform linear regression to predict the value of a house based on some input features
- Used nested cross validation and hyperparameter tuning to get the best performing model
- https://github.com/kt1719/Neural-Networks

Professional Experience

Remote Academic Tutoring 10/2020 – present
Mytutor London, United Kingdom
- Tutored multiple students in STEM related subjects. Primarily focused on Maths in both A level and GCSEs

Internship 07/2018 – 08/2018
OTM Servo Surrey, United Kingdom
- Used CAD software to model a specific part of an actuator to get a better idea of model design
- Helped with the machinery and assembly of components

Skills

Technical Skills
- C++/ Matlab / Python / Verilog (Advanced)
- C / C# / MIPS & MU0 Assembly / Flex / Bison / Yacc / Lex / Quartus Prime Lite (Intermediate) / Machine learning algorithms / Optimization algorithms
- SQL / AWS / HTML5 (Beginner)
- Experienced Working with Github & Bash Scripts

Other Skills
- Good with Physics scripting, Animation, UI in Unity
- Fluent in English and Tagalog