Louys T.K. Hong

tkh2017@ic.ac.uk • louyshong.github.io • github.com/louyshong

Education

2017 - 2021Imperial College London

- 4th year MEng Electronic and Information Engineering student
- Final year project entitled "End-to-end Deep Learning-based Autonomous Driving on

Embedded GPU Platforms"

Dean's List for all years Awards:

> Silvanus P Thompson Prize for Top Student in 2nd year (80.84%) Head of Department's Prize for Top Student in 1st year (80.52%)

Maurice Hancock Prize for excellence in A Levels

Relevant Courses: Machine Learning Software Engineering **Privacy Engineering**

> Algorithms & Data Structures High Level Programming Computer Architecture

Work Experience

2020 Software Engineering Intern at Schlumberger UK

- 6-month internship supporting a team of geophysicists in developing scientific software using Python
- Implemented a novel algorithm that crunches and analyses geophysical data
- Developed a responsive GUI for the algorithm that reduces the processing time from days to minutes
- Libraries used: NumPy, pandas, SciPy, Matplotlib, Tkinter

2019 Undergraduate Teaching Assistant at Imperial College London

Conducted weekly problem classes for Maths: answering questions, marking problem sheet submissions and providing feedback to 1st year students

2019 **Software Engineering Intern** at Curlec (Malaysian Fintech startup)

- Performed data analysis on transaction databases and experimented on creating reports with Google Data Studio
- Implemented a progressive web application to showcase interactive data visualisations and dashboards
- Developed a custom recurring payments management system for a client using Curlec's API
- Technologies used: Angular, Spring, PostgreSQL

Skills

Python SQL C F# Javascript Keras Tensorflow HTML&CSS Git Azure Java

Notable Projects

VeriTINY 2020

Repo: github.com/ImperialCollegeLondon/veritiny

- F# implementation of a Verilog simulator for digital circuit design, cross-compiled into an Electron app
- Features a Verilog code editor, a block connections interface and a circuit simulator

2020 StarGaze IoT Telescope

Website: lactuca3.github.io/StarGaze

- Built a smart telescope and a companion app that helps enthusiasts find constellations and planets
- Technologies used: I2C, MQTT, C#, Python

2019 **Vision Text-to-Speech Reading Device**

- Website: visiontts.weebly.com Led a team of 6 in the creation of a low-cost learning aid for dyslexic students
- Built an optimised text recognition pipeline with OpenCV and Google Cloud Vision

2018 **EEE Rover**

Developed an Android app-controlled rover that detects electromagnetic signals using C++

Other Interests & Activities

Present The Complete Web Development Bootcamp by London App Brewery (Udemy)

Learning full-stack web development tools such as Bootstrap, MongoDB, Node.js and Express