Louys T.K. Hong

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Education

2017 – 2021 **Imperial 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"

Awards:
Dean's List for all years
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	Databases
Algorithms & Data Structures	Optimisation	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 **C** **C++** **F#** Javascript Java SQL Keras Tensorflow HTML&CSS Git Azure

Notable Projects

2020 **VeriTINY** *(High Level Programming coursework)* *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** *(Embedded Systems coursework)* *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