

# Louys T.K. Hong

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## Education

2017 – 2021

### Imperial College London

- 4<sup>th</sup> 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 2<sup>nd</sup> year (80.84%)

**Head of Department's Prize** for Top Student in 1<sup>st</sup> year (80.52%)

**Maurice Hancock Prize** for excellence in A Levels

Relevant Courses:

Machine Learning

Algorithms & Data Structures

Software Engineering

High Level Programming

Privacy Engineering

Computer Architecture

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## 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 1<sup>st</sup> 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**

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## Skills

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

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## Notable Projects

2020 **VeriTINY**

Repo: [github.com/ImperialCollegeLondon/VeriTINY](https://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: [lactu3.github.io/StarGaze](https://lactu3.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](https://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++

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## 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