Louys T.K. Hong

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

---

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	Operations Research	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