

EDUCATION

Imperial College London	United Kingdom	Oct 2020 – Jun 2024 (Expected)
<ul style="list-style-type: none">• MEng in Electrical and Electronic Engineering Year 1: 74.31% (top 20%), Year 2: 72.77% (top 20%)• Relevant Modules: Analog Integrated Circuits, Digital Signal Processing, Electromagnetics, Programming for Engineers, Digital Electronics and Computer Architecture, Linear Algebra, Probability & Statistics, Machine Learning, Power Electronics, Optoelectronics		
Anglo Chinese School (Independent)	Singapore	Feb 2017 – Nov 2019
<ul style="list-style-type: none">• International Bacclaireate Diploma Program, 41/45 points overall, HL Math 7, HL Physics 7, HL Chemistry 7		

EMPLOYMENT

Front-end Developer	Bühler UK Ltd, London, United Kingdom	Jul 2022 – Sep 2022
<ul style="list-style-type: none">• Interned in the Data Analytics and Services team, focussing on Sortex optical sorting machines• Developed desktop Graphical User Interface (GUI) using ElectronJS, ReactJS and TailwindUI for querying an internal data management platform and managing API key access• Developed 2nd GUI for editing a configuration file using a dynamically generated form based on a JSON schema• Setup CI/CD pipeline on Azure DevOps with test, build and publish stages to distribute application for user testing• Presented applications to both technical and non-technical users to gain feedback which was then incorporated in later versions		
Part-time Peer Tutor	Imperial College London	Oct 2021 – Apr 2022
<ul style="list-style-type: none">• Conducted one-to-one help sessions for students taking the Topics in Electrical Engineering module		

LANGUAGES AND TECHNOLOGIES

- **Programming:** Python, Javascript, C++, Matlab, SQL
- **Tools:** Verilog, LTSpice, LabView, Simulink, Git, IBM Cloud, WordPress, Excel, Word, PowerPoint, Fusion 360

TECHNICAL EXPERIENCE

Academic

- **Autonomous Mars Rover (Top 2nd year group project)** Worked in a 7 member group to create a 2-wheel rover designed to autonomously navigate through a simulated Martian surface with obstacles. In drive subsystem, worked on interfacing optical flow sensor and motor driver with ESP32 micro-controller and designed control algorithm. In radar subsystem, designed and implemented circuit to filter, amplify and detect peak amplitude and frequency of Doppler radar signals.
- **Analogue Music Synthesizer (Top 1st year group project in category)** Designed and simulated a 88-key analog music synthesizer in LTSpice. Considered the product design specifications, costs, power consumption and waveform quality. Created a Python program to transcribe frequencies from a CSV file to piece-wise voltage level directives in LTSpice for testing.

Non-Academic

- **Personal Website** Created website with GatsbyJS for the front-end and Strapi.io for the content management system (CMS). Optimized layout and images for different screen sizes and setup continuous deployment for static content on Netlify from Github repository. Configured Linux VPS, Postgres database and Nginx server to host CMS.
- **Optiver TraderCraft 2021 (2nd placed team)** Created a Python delta hedging trading algorithm and competed with other teams to make highest profit. I was selected to attend the Insights Days program.
- **European Organization for Nuclear Research (CERN) 2019** Selected among 30 students for a weeklong study trip. Attended lectures on topics including particle physics, computing and medical applications. Visited data centre, CMS detector and anti-matter factory.

ONLINE COURSES

- **Build Basic Generative Adversarial Networks 2022** Learnt foundational concepts of GANs and created basic GANs with PyTorch
- **IBM Fullstack Cloud Developer Certificate 2021** Completed 10 courses on various Application Development and Cloud technologies
- **Deep Learning Specialization 2020** Completed online course on the basics of Deep Learning including CNNs, RNNs, hyperparameter tuning, optimization and structuring ML projects
- **Intro to Digital Manufacturing 2020** Completed online course on foundational concepts of Autodesk Fusion 360 CAD/CAM software. Learned about digital manufacturing, principles of sustainable design, and manufacturing processes
- **Yale Financial Markets 2020** Completed online course on introduction to finance taught by Dr Robert Shiller

ACTIVITIES AND INTERESTS

- Violinist at IC Sinfonietta Orchestra and pianist with ABRSM grade 7 Piano
- **President of IC AstroSoc** I collaborate with my committee to organise stargazings, lectures and trips and to maintain our telescopes
- **IC Space Society** Constructing a rocket to participate in the National Rocketry Championship. As part of the electronics team, I am designing a flight computer to record and transmit sensor values.