

Education

Imperial College London

Dyson School of Design Engineering 2018 - 2022

MEng Accredited by the IED, the IET, and the IMechE
(2:1 Upper Second Class)

Modules Include: Design, Mechanics, Electronics, Engineering Mathematics, Computing, Production and Materials, Gizmo: Physical Computing, Energy in Design (Thermofluids), Big Data, Engineering Design Project, Enterprise Roll Out, Sensing and IoT, and Audio Experience Design.

Christian Alliance International School (CAIS), HK 2011 - 2018

Alberta High School Diploma (High Honours): Mathematics 30-1 (93%), Mathematics 31 (96%), Physics 30 (91%), Art 30 (91%)

Projects

Connect: Explore

*Expert's Pick in the London Design Biennale

Explore is a device and system to create an independent museum experience for blind visitors.

- Conducted primary, secondary, and tertiary research, on subject matters such as the competitor market, interviews with a blind user, opportunity areas, and compliance with EU legislation and international standards
- Developed concepts and physical prototypes
- Presented idea with slides, and performed voiceover in pitch video

Tuntre

Tuntre is a concept start-up company with the core objective of improving the plant care or "plant parenting" experience.

- Designed and prototyped a 3-in-1 watering tool in a group
- Performed extensive market research and conducted stakeholder interviews
- Presented start-up and business plan through a website, created product video
- Managed social media page

Electrochromic Day Shapes

*Joint first place in Imperial College DesSoc Makeathon

This was a one day makeathon concept design using electrochromic glass as a permanent day shape fixture as an alternative to hoisting.

- Performed ideation in a group
- Used Solidworks to CAD model, render and perform FEA simulation on concept
- Presented idea in a video

Experience

Ocean Infinity (Design Engineering Intern)

Apr 2021 - Sept 2021

Six month design engineering placement at a marine robotics company.

- Learned and practiced model based systems engineering
- Designed and prototyped a novel, mechatronic, remotely operated flag signalling system for remotely operated marine vessels

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Skills

Soft Skills

Please see Extracurricular Activities for examples of soft skills such as: leadership, team work, and interpersonal skills

Design Software

Proficient with **Adobe Suite**, particularly with **Illustrator** and **InDesign**

Proficient with **Solidworks**, for 3D modelling and FEA Analysis

Design

Proficient at **Rapid Prototyping**, including **3D Printing**

Experience using laser cutters, and workshop equipment

Coding

Proficient in **Python**, **C++**, **HTML**, **CSS**, and **Arduino IDE**, with experience using **Matlab**, **C#** (in Unity) and **Javascript**

Productivity & Office Software

Proficient with **Microsoft Office 365**, with experience using

Teams and **Outlook** for project management, and regularly

using **Excel** and **Excel formulas** for personal account keeping

Proficient with **Google Workspace**

Media Software

Proficient with **OBS**, with experience producing and

administrating Church services on **Zoom**

Proficient with **Voicemeeter** and **Audacity**, with experience

using **Cakewalk** and **Reaper**

Proficient with **Blender** for 3D modelling and basic animation

Proficient with **Adobe Suite**, particularly with **Premiere Pro**

Languages

Native **English** speaker with conversational skills in **Cantonese** and **Mandarin**

Extracurricular Activities

Volleyball (Player and Assistant Coach)

2016 - 2022

- Played on various teams (CAIS U20 (ISSFHK), Imperial College Chinese Society team, ICVC (Imperial College Volleyball Club) Mixed team, and ICVC Men's First (BUCS Premiere South), working with various coaches and players
- Helped coach and run trainings for CAIS in 2018 and 2019 summers, as well as ICVC beginner sessions in 2021-2022
- . In 2022, I helped organise and host an 8 team (~90 person) volleyball tournament in London for the Hong Kong Societies at universities in the UK.

Glow in the Dark (Student Group for Christian Ministry at CAIS) (Member and Student Leader)

2013 - 2018

- Led worship and worship team during school chapels and events
- Planned and led activities with co-leaders on outreach trips to China, teaching English to middle-school students and inviting them to church