

Nate Chu

Hong Kong | London, United Kingdom

+852 6193 4952 | +44 7763 246314 | natechu65@gmail.com

LinkedIn: <https://www.linkedin.com/in/long-yin-chu-92577a226/>

Past Project Workspace: <https://lycoda.github.io>

Skills

Languages: *English* (Native), *Cantonese* (Native), *Mandarin* (Native)

Skills: *Microsoft Office Suite* (Advanced), *AUTOCAD* (Intermediate), *MATLAB* (Intermediate), *Python* (Intermediate), *Materialise* (Intermediate), *RedCap* (Intermediate), *Microsoft Power Automate* (Intermediate), *LabVIEW* (Advanced), *Logisim* (Advanced)

Experience

Production Intern

Hong Kong

Koln 3D

06/2024 - 08/2024

- Developed an automated clinical follow-up system using RedCap for data collection and quantitative analysis
- Assisted in production of 3D printed metal implants using CAD modelling software Materialise
- Designed multiple 3D printed bone models displays for use in business exhibitions and test-fitting before product delivery

Summer Intern

Hong Kong

Golden Cedar Ltd

06/2023 - 08/2023

- Collaborated cross-departmentally with Sales, Sample, QC, and Logistics teams, gaining multifaceted insight into the textile industry
- Assisted in high-value business transactions from order to product delivery

Marketing Intern

Hong Kong

Audrey

06/2022 - 08/2022

- Created eye-catching graphics for social media platforms increasing website engagement by 200%
- Analysed existing products for improvement opportunities, implementing bundles and strategic re-pricing that significantly boosted sales.

Education

City University of London, UK

09/2022 - 06/2025

BSc (Hons) Bio-Medical Engineering (Expected: 1st Honor)

Abbey College Cambridge, UK

09/2020 - 06/2022

A Levels: Math, Biology, Chemistry

Queen Ethelburga's College, UK

09/2018 - 06/2020

GCSE: Eight subjects (grades 7-9) Including: Trilogy Science, Math, History, Geography, Business Studies, English, Chinese

Projects and Achievements

Self-Stabilizing Spoon For Alzheimer's Patient

London, UK

Group Leader

11/2024 - 12/2024

- Designed, programmed and built a self-stabilizing spoon using IMU, servo motors and Arduino Nano
- Programmed software to handle IMU data and incorporating Kalman Filters, PID Controllers to counteract involuntary movements
- Led team meetings, ensuring project milestones were met

Construction Of ECG Amplifier Using OP-Amps

London, UK

Student

02/2024 - 04/2024

- Designed, tested and built an ECG Amplifier with Instrumental Amplifier, Notch Filters
- Further digitally processed to identify for abnormal heart rate alerting users of bradycardia or tachycardia
- Developed skills in circuit design and building, additionally digital processing of signals

Computer Science & Programming Task

London, UK

Student

02/2023 - 03/2023

- Analyzed network traffic data using Pandas and Matplotlib, performing data manipulation and visualization
- Built a student data management system using object-oriented programming, featuring terminal-based user interaction and data visualization
- Enhanced skills in Python, data processing, and practical problem solving

Monte Carlo Simulations For Light-Tissue Interaction

London, UK

Student

02/2024 - 04/2024

- Modelled light interactions in biological tissues using Monte Carlo simulations, focusing on absorption, scattering, and anisotropic scattering
- Analyzed and visualized results in MATLAB to validate theoretical principles such as Beer-Lambert Law and Henyey-Greenstein phase function
- Investigated biomedical applications, including pulse oximetry and near-infrared spectroscopy

Programming With Python Course From Meta

London, UK

Student

12/2023 - 03/2024

- Grade achieved: 100% achieving a certificate from Meta
- Gained an intermediate understanding of Python programming

Abbey Basketball Team

Cambridge, UK

1st Team Captain

09/2021 - 06/2022

- Elected to a position of trust, motivating and coaching students during inter-school competitions.
- Responsible for organizing training sessions + recreational pick-up games.