

MAN YUI LEE

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Education

Imperial College London

Sep 2022 - Sep 2023

MSc in Biomedical Engineering (Biomechanics and Mechanobiology)

London, UK

- Graduated with Distinction (Expected)

University of Sheffield

Sep 2019 - Jun 2022

BEng in Bioengineering (Biomaterial science & Tissue Engineering)

Sheffield, UK

- Graduated with 1st Class Honours

Wymondham College (UK) | A-Levels : Maths, Physics, Biology, Chinese

Sep 2017 - Jun 2019

St. Mary's Canossian College (HK)

Sep 2013 - Jun 2017

Modules

- Medical Imaging and Technology
- Medical Devices and Implants
- Orthopaedics & Fluid Mechanics
- Electric and Electronic Engineering
- Molecular & Cell Biomechanics
- Biomechanics & Biomaterials
- Statistics & Data Analysis
- Programming (Python)
- Finance, Law & Management

Experience

Chinese University of Hong Kong

Jun 2021 – Aug 2021

Summer Undergraduate Research Programme – Research Attachment

Hong Kong

- Developed a high-throughput microfluidic platform with photolithography and analysed RBC deformability (1000/sec).
- Honored Best Presentation Award for effectively communicating complex findings to 80+ interdisciplinary engineers.

China Development Bank Hong Kong Branch

Jul 2019 - Aug 2019

Filing and Secretarial Clerk

Hong Kong

- Managed and processed 50+ confidential documents daily, collaborated with a 5-member team to ensure task efficiency.
- Facilitated cross-departmental cooperation, addressed professional requests & cultivated positive working relationships.

Chinese YMCA of Hong Kong (Kowloon Centre)

Jul 2018 - Aug 2021

Senior Mentor (Part-time)

Hong Kong

- Directed programs for 30+ participants, provided leadership and guidance to 4 junior mentors in activity coordination.

Projects & Awards

Automated high-content microfluidic platform | Python, MATLAB, Autodesk Inventor, 3D printing

Sep 2023

- Engineered an automated PMMA microfluidic system with integrated valves, facilitating simultaneous medium exchange across parallel channels, enhancing the scalability of drug screening devices to analyze > 24 drugs concurrently.

Cornea-on-Chip | Microfluidics, Cell culturing, Computational modelling, Image Processing

May 2022

- Developed an cornea-on-chip that recapitulates the dynamic *in vivo* blinking action for high-throughput drug testing.
- Accessed growth dynamics of epithelial monolayer under static and bi-directional shear flow in the platform.

Hip implant coating with RGD-CS-Ti | Business pitching, Risk assessment

Feb 2021

- UoS 'Engineering You're Hired' National Business Pitch Competition – Finalist
- Came 1st out of 20 teams cooperating in a team of 6, dedicated to commercialising a novel bioengineering hip implant.
- Evaluated 10 years of profit margins by conducting rigid cost analysis, potentially saving NHS 4.62M/year post-launch.

Digital Travel Information App | Project leader, Project management & analysis

Mar 2020

- Global Engineering Challenge & EWB Engineering for People Design Challenge - Finalist
- Led a 6-person interdisciplinary team to devise a mobile app addressing real-life transportation challenges in Johannesburg, securing the "Best Communicated Overall Solution" amongst 15 teams and potentially impacting 22,500 users.

Extracurricular

Imperial College & University of Sheffield Women's Basketball - First Team

Sep 2019 – Sep 2023

- Demonstrated exceptional commitment and teamwork skills and competed in UK National leagues & d.

University of Sheffield Hong Kong Society - Secretary

Sep 2020 – Jun 2021

- Acted as the first point of contact for the society & facilitated communication between 50+ members and committee.

Skills & Language

Proficient in Python, MATLAB, Autodesk Inventor, ANSYS, ImageJ, Excel, SQL, Tableau.

Native in English, Cantonese. Fluent in Mandarin.