LEON ZHANG

leon@zhang.co.uk · +44 7480 478278 · leonzhang.co.uk
linkedin.com/in/leonczhang · github.com/neonzhan

EDUCATION

Imperial College London — London, UK
MEng Design Engineering *Predicted 1st Class Honours* — Oct 2021 - June 2025
- **Relevant Modules:** Design (Industrial, Human-Centred, Sustainable); Core (Electronics, Robotics, FEA, Solid Mechanics, Optimisation, Materials & Manufacturing, Computing, Additive Manufacturing)

Wilson's Grammar School — London, UK
Secondary School — Sept 2014 - May 2021
- **A Levels:** Mathematics (A*), Physics (A), Economics (A); **GCSEs:** 10 A*s, 2 As

EXPERIENCE

HumanForest — Imperial College London, UK
eBike Design Engineering Intern — Aug 2023 - Sept 2023
- Developed concepts on CAD (**Fusion 360**) to improve the current design after aligning with 5 internal teams for improvements involving marketing, design & performance
- Iteratively refined concepts using FEA simulation tools (**Ansys Mechanical**), achieving the optimal structural integrity for Forest's design constraints
- Presented clearly on **Figma** to seniors and externals, which was positively received due to significantly reduced maintenance costs and increased **accessibility** for users shorter in height and/or are weaker
- Drove systemic change in communication with external suppliers for key design goals, **achieving a year's worth of supplier development in three weeks**

PROJECTS

TheraFlex *Industrial Design Engineering Group Project* — Mar 2023 - June 2023
- Designed a market-ready portable exercise machine for recovery of shoulder/arm injuries in users
- Engineered a **user-centric design** on CAD based on user + expert-led goals, with **C++** coding on Arduino for functions and mechanics
- Optimised manufacturing processes, leading to a 50% reduction in assembly time

PID Segway *Electronics PID-tuning and Waves Project* — Jan 2023 - Mar 2023
- Processed signals by analysing sound waves on MATLAB for data manipulation
- Synced movement with music beats using **Python** and implemented dynamic beat lighting

Razor Sustainability *Sustainable Design Project* — Oct 2022 - Dec 2022
- Designed a sustainable and circular product-service system for the razor industry to diminish razor waste, by collecting data from the existing industry and evaluating **user habits**
- Conceptualised a company using a business model with razor products that integrate well into the system, ensuring a strong alignment with **user journeys and profiles**
- Conducted an eco-audit and evaluated user feedback, concluding a 64% decrease in CO2 and energy footprint and desire for the simplicity of the system

TACET *Human-Centred Design Project* — Mar 2022 - June 2022
- Designed and engineered a physical product to manage stress among university students
- Iteratively designed models using CAD (**Fusion 360**), backed by primary + secondary research
- Implemented a tracker using **Python** and an accelerometer to monitor users' movements, collecting quantitative data to surface **UX insights** on student patterns

VOLUNTEERING AND LEADERSHIP

Design Engineering Treasurer — Imperial College London, UK
Design Engineering Society — June 2023 - June 2024
- Planned events, including sponsored make-athons with P&G and other large social events
- Predicted cash flow and budgeted expenditures using estimates and expense sheets, taking stewardship of the society's annual £50,000 turnover and membership base of 660 students

Imperial ABACUS President — Imperial College London, UK
Association of British and Chinese University Students — June 2022 - June 2023
- Planned inter-university events with other top London universities' ABACUS presidents, including leading an event with 1500 attendees
- Increased memberships to 450 students via collaborations with 7 Asian businesses in London

SKILLS & INTERESTS

Technologies/Languages – Experienced with InDesign, Photoshop, Solidworks, Autodesk Fusion 360; familiar with Python, JavaScript, HTML/CSS, MATLAB, Granta EduPack; exposed to Figma.

Skills & Hobbies – Intermediate in Mandarin and German. Experienced musician, with interests in piano (ABRSM Grade 8), violin (Grade 4), flute (Grade 2), guitar (self-taught) and music production (FL Studio).