

MARWIN WONGJARUPUN

BEng (Hons) Electronics and Computer Engineering - The University of Leeds

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EDUCATION

University of Leeds, School of Electronic and Electrical Engineering **Leeds, United Kingdom**
Bachelor of Engineering (Hons) Electronics and Computer Engineering *2020 – 2023 (Expected)*

- Predicted Upper Second Class Honors
- Modules: Embedded Systems, Distributed Systems, User Interface, Algorithms, etc.

Triam Udom Suksa School **Bangkok, Thailand**
• GPA: 3.2/4 *2016 – 2020*

Seminole High School **Florida, United States**
• Selected for American Field Service exchange program *2018 – 2019*
• Studied AP Physics C Mechanics, AP Physics C Electricity and Magnetism and AP Calculus BC with an average of 100%
• Weighted GPA: 4.65/4

WORK EXPERIENCE

XR Bootcamp XR Foundations and Prototyping Bootcamp **Germany, Remote**
Prototyper *August - December 2022*

- Grade: High Honours
- Chosen as one of the 15 students for the Beyond Inclusion scholarship (out of 410 applicants)
- Focused on C# programming and Unity VR Development
- Developed 4 XR Prototypes (alone) and 2 XR MVPs (teamwork)
- Created 1 Prototype in collaboration with industry partner company Pearson

University of Leeds Summer Internship **United Kingdom**
Student *June - October 2022*

- Added remote functionality to hip simulator (can simulate through cloud platform)
- Interfaced with Arduino Duo with 32-bit ARM core microcontroller
- Used PWM signal to control stepper motors

Chinese University of Hong Kong Summer Undergraduate Research Programme **Hong Kong, Remote**
Student Researcher *June - August 2022*

- Grade: A
- Created Pong-like game to encourage stroke patients to perform exercises that improve brain function
- Developed using Unity, C#, and Oculus Quest 2

Shanghai Jiao Tong University Summer Research Internship Program **China, Remote**
Student Researcher *June - August 2022*

- Grade: A
- Investigated Technology regarding 3D non-rigid registration of human liver, with input of pre-operative 3D model and intra-operative deformed model, and output
- Coded using VTK and python

Transitional Housing for the Homeless **Thailand**
Researcher *June 2021 – December 2021*

- Studied the increasing homelessness phenomenon in Thailand through collecting statistics
- Constructed 2 proposals for government and research institution grants

UNIVERSITY PROJECTS

Microfluidics Integrated Microwave Sensor Using Additive and Subtractive Manufacturing *Ongoing*

- Design, simulate and develop a microfluidic device that uses microwave sensors that detect, identify, and quantify reactions of fluidic and liquid mixtures
- Use additive manufacturing (ie. 3D printing) and subtractive manufacturing (ie. laser cutting)
- Research resonance methods for liquid detection and construction of substrate integrated waveguides
- Design and develop using CST Microwave Studio Design package

- Integrated Web Service Client in Distributed Systems Module** 2022
- Built application with own RESTful web services using Jersey and Java
 - Utilised existing Youtube API to extract comments from video
 - Integrated 3 web services with a client written in Python
 - Implemented MySQL for data storage
- GUI Design for Video Playing Application in User Interfaces Module** 2021
- Performed a PACT Analysis on prototype to scope possible requirements
 - Implemented and iterated 5 Development Cycles Using Qt
 - Evaluated cycles with potential users using cognitive walkthrough, heuristic evaluation, etc.
- Case Study for Doppler Application in Electronic Circuit Design Module** 2021
- Analysed datasheets to meet design requirements
 - Calculated component values and chose appropriate filter design and circuit configurations
- Implemented Refreshable Braille Display in Digital Electronics and Microcontrollers Module** 2020
- Built using 6 solenoids and Arduino
 - Coded program that outputs braille characters according to input string
 - Implemented safety features such as using diodes to prevent accidental discharge

LEADERSHIP POSITIONS

Leeds Debating Union Leeds, United Kingdom
President 2021 - 2022

- Host weekly debates with tailored topics with 200 members
- Lead bi-weekly meetings with 6 committee members
- Facilitate collaborations between two societies regarding controversial worldly issues
- Train and oversee 18 teams for university-level debating competitions

MedTech Foundation Leeds Leeds, United Kingdom
Internship Officer 2021 - 2022

- Communicate with research centers and medical technology firms
- Aid 5 regional centers in its setup through online marketing

ACADEMIC ACHIEVEMENTS

Thailand High Schools Debating Championship 2017 October 2017

- Quarter-finalist out of 34 teams debating in Asian Parliamentary format

South East Asian Youth Leadership Program 2017 Participant April 2017

- Selected by the US Embassy of Thailand for a three-week US-based exchange
- Established project in home community about bridging gap between youngsters and elderly people

TECHNICAL SKILLS

Python	C/C++	Matlab	Qt	Verilog
Java	Git	MySQL	Microsoft Word, Excel, PowerPoint, Teams	

LANGUAGE SKILLS

- Fluent in English and Thai
- Proficient in Chinese Mandarin
- Beginner in French

KEY EMPLOYABILITY SKILLS

- Innovation – Pitch use of VR for children on the autism spectrum for pain assessment to medical industry leaders
- Self-discipline – Learn Chinese and French throughout high school and university independently
- Teamwork – Build fighter robot with teammates for Robot Fighting League

INTERESTS

- Human-Computer Interaction: Completed HCI Course by Georgia Tech edX August 2021
- Machine Learning: Completed Machine Learning Course Stanford Coursera July 2020
- Piano: Merit in Piano Trinity Grade 6 and Distinction in Piano Trinity Grade 5 June 2017
- Mechanical Keyboards: Assembled, soldered, mechanical keyboards and commissioned builds