

CHUAN ZHE FU (JEREMY)

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PROFILE

- Penultimate UCL Computer Science student with a strong foundation in software development
- Successfully concluded a Software Development Engineering (SDE) Internship at Amazon, gaining experience in AWS services and databases
- Proficient in C, C++, C#, Python, Java, Haskell, Microsoft Word, Excel, PowerPoint and Adobe softwares

EDUCATION

University College London – MEng Computer Science 2022 - 2026

- Minor in Crime and Security Engineering
- Core modules include Algorithms, Principles of Programming, Logic, Discrete Mathematics, Design and Professional Skills, Theory of Computation, Object-Oriented Programming, Computer Architecture and Concurrency, Security Technologies and Cybercrime
- Currently on track to graduate with First Class Honours

Sunway College, Malaysia – Cambridge GCE Advanced-Level (A Level) 2021 - 2022

- 4A* (Mathematics, Further Mathematics, Chemistry and Physics)
- Awarded Best Across Four in Malaysia, Top in the World for Mathematics and Further Mathematics and Top in Malaysia for Physics

PROJECTS AND EXPERIENCES

SDE Intern, Amazon Prime Video & Studios CoreTech (London, UK) 2024

- Spearheaded the development of an API in Java to automate \$4.4 million worth of device partner payments, focusing on QR code-driven purchases.
- Built a robust data ingestion layer utilising AWS Lambda, Kinesis Data Stream, and DynamoDB, processing large volumes of data efficiently.
- Authored comprehensive and detailed design documentation and facilitated feedback sessions via document reviews and presentations.
- Ensured API and pipeline reliability by implementing extensive unit and component testing.

EnergyGuard Version 3, UCL 2023 - 2024

- Enhanced EnergyGuard, a .NET C# application that optimises energy consumption for multi-core systems by leveraging Intel's hybrid architecture, addressing the challenge of rising energy costs.
- Implemented data visualisation features displaying carbon offset values and cost-saving estimates, improving user-centricity and system usability.
- Integrated the service with Xbox Game Bar, allowing users to monitor data and adjust settings mid-game via an overlay.
- Worked closely with mentors from Intel and Microsoft to refine and improve the project.

Propositional and First-Order Logic Parser 2023

- Developed a Python parser capable of validating the syntax of both propositional and first-order logic formulas, utilising a parse tree structure.
- Implemented the analytic tableau method to check the validity of propositional and decidable first-order logic formulas.

Electricity Generating Footwear, Engineers Without Borders Society, UCL 2022

- Collaborated with a team of four to develop a piezoelectric shoe prototype that harvests walking movements to power LED lights sustainably while exploring feasible technology for improved efficiency.
 - Designed electrical circuits and increased electrical efficiency of the product through iterative testing.
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ACHIEVEMENTS AND LANGUAGES

ACHIEVEMENTS

- Valedictorian (Most Outstanding Student) for class 2022 graduates in Sunway College.
- Won 'Excellence Award' in National Chinese School Magazine Competition 2021.
- Awarded 'Certificate of Distinction' in Chen Jing-Run's Cup Secondary School Maths Competition in year 2019, 2018 and 2017.
- Champion in 'The Market Entry Strategy Workshop Group Competition' by FedEx Express / JA International Trade Challenge Malaysia in 2018.

LANGUAGES

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| • English and Chinese Mandarin | Full Professional Proficiency |
| • Malay | Professional Working Proficiency |