

◇ SUMMARY

A hardworking and motivated individual, I was awarded the Zepler Prize for having the top mark in Electrical & Electronic Engineering Part I, 2018/19. I am proficient in System Verilog, C, C++ programming languages as well as a number of simulation software programmes. While I am keen on maths, I also have the tendency to be especially persistent when it comes to solving problems. It is my philosophy to truly understand the underlying principle of something that piques my interest.

◇ EDUCATION

University of Southampton

MEng in Electronic Engineering, Second Year

2018-
2022

Modules: *First Year:* Digital System & Microprocessor · Advanced Programming · Electronic System · Mathematics for EEE · (*Overall mark: 90%*)

Second Year: Digital System & System Processing · Computer Engineering · Electronic Design · Control & Communication · Advanced Electronic Systems

Projects: **Digital Stopwatch Design** Oct 2019

- ▷ A stopwatch with 99.9 seconds range consisting of synchronous counters, a nibble multiplexer and a seven-segment decoder
- ▷ Designs are simulated on an IC design environment and sent for fabrication
- ▷ Circuits are fitted on an area of $146\mu\text{m} \times 135\mu\text{m}$, part of TSMC $0.18\mu\text{m}$ -tech chip

Software: Tanner S-edit, L-Edit

Interactive Whiteboard Client-server May 2019

- ▷ An interactive whiteboard which pairs of users can use to view and edit on their respective Raspberry Pi simultaneously
- ▷ Created a GUI for better user experience using a widget toolkit, Qt5
- ▷ Designed a communication protocol that is connected by the Raspberry Pis' GPIO
- ▷ Implemented a thread-safe environment with pThread library

Languages: C++

Digital System and Microprocessor Design Jan 2019

- ▷ Design a simple microprocessor using System Verilog and run it on the DE1-SoC Development Board (Altera Cyclone V FPGA)
- ▷ Microprocessor modules functionalities are verified in a simulation environment
- ▷ Instruction sets are modified to perform XOR-cipher encryption and decryption tasks.

Languages: System Verilog · Software: ModelSim, Quartus

UEM Foundation College, KYUEM

Cambridge A-Level

2017-
2018

Grades: Physics (A*), Chemistry (A*), Mathematics (A*), Further Mathematics (A*)

Prizes: Certificate of Achievement: Excellence in the subject of Further Mathematics for Semester of July to December 2017

◇ ACHIEVEMENTS

Zepler Prize 2018/19.....Nov 2019

- ▷ Top mark in Electrical & Electronic Engineering Part I 2018/19 with a grade average of 90%

Master of Mainframe Part 2 Badge.....Dec 2019

- ▷ Completed Part 2 of the challenge about the latest IBM-Z mainframe.
- ▷ Gained experience with programming languages like Db2, JCL and operating system z/OS.

◇ TECHNICAL SKILLS

Coding Languages: C, C++, System Verilog, MATLAB

Software: ModelSim, Quartus, LT-Spice, Tanner S-edit, L-edit, EAGLE PCB Software

Other: Git, Embedded system, Qt5, LaTeX

◇ EXTRACURRICULAR ACTIVITIES

Malaysian Students Association - Male Sports Officer.....May 2018 - present

- ▷ Taking care of the welfare of Malaysian students studying at the University.
- ▷ Arrange weekly sports session and occasional sports events for the society members.

Nepal Project (Student-led) – Event manager.....Jun 2017

- ▷ Responsible for the cultural trip planning and directing performances for visitation to schools, orphanage and monastery at Nepal
- ▷ Fundraised primarily for schools severely affected by the 2008 earthquake

Cross-country Running – President.....Jun 2015

- ▷ Assign tasks to sub-groups and have regular meetings to ensure cooperation between team leaders.
- ▷ Manage event involving 1000+ participants and ensure the safety of every student

◇ INTERESTS

Basketball A passion that has been following me for more than 10 years. I played competitively during high school

Reading Particularly inclined towards Popular Science genre, for example, *Thinking Fast and Slow* by Daniel Kahneman.

◇ LANGUAGES

English (Fluent) · *Mandarin (Native)* · *Malay (Native)*

◇ REFERENCES

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