

# TUNG DO VIET

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## EDUCATION

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### University of Southampton

Southampton, UK

*BEng Electrical and Electronics Engineering*

Sep 2019 – Present

- First year result: 67% (2:1)

*Engineering, Physics, Maths, Geophysics Foundation Year*

Sep 2018 – Sep 2019

- Overall result: 80%

### The English College in Prague

Prague, Czech Republic

*International Baccalaureate and IGCSE*

Sep 2016 – Jul 2018

- International Baccalaureate: 32 points
- IGCSE: Maths (A\*), Physics (A), Chemistry (B), Biology (B), Geography (B)

## ENGINEERING PROJECTS, WORK & LEADERSHIP EXPERIENCE

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### Garrison Technology (Cybersecurity), Junior Electronics Engineer

Sep 2021 – Present, UK

- Led development of test design for controller board for mass production, and coordinated production team as well as hardware team to take project from its initial proof of concept to its final test rig design
- Designed PCB board using Altium Designer to create interface between Raspberry Pi and controller board with added features such as io expander and analogue switch
- Implemented Raspberry Pi and wrote software to emulate different parts of system that is integrated with controller board to test all interfaces, including UART, I2C, SPI, PWM and GPIOs
- Worked collaboratively with production team to prioritise concurrent projects and ensure that products are reliable, tested and efficiently delivered within established timeframe
- Worked directly with subcontractors to ensure production process runs smoothly and liaised directly with buyers to arrange re-deliveries and resolve RMAs

### Smart Meter Design, Team Leader

Feb 2021 – Mar 2021, UK

- Managed team of 7 members to develop smart electricity meter to manage micro grid with budget of under £25 in 7 weeks
- Designed and built power supply unit, smart meter, interface circuitry, control software and display
- Researched and developed most efficient capacitor supply unit which converted AC line input to DC voltage needed for functionality of smart meter using Multisim, VeeCAD and Tincad.
- Resolved issues related to interface between micro grid and microcontroller by constructing voltage level shifter, voltage divider and op amp circuitry to convert AC and DC signals to be compatible with either micro grid or microcontroller

### Integrated Circuit Design, Team Leader

Oct 2020, UK

- Led team of 6 members to design integrated circuit in accelerated timeline of 3 weeks, which was subsequently fabricated by Taiwan Semiconductor Manufacturing Company
- Created schematics and layouts for Ring Oscillator, 9-bit Sequence Recognition, Asynchronous Serial Interface using S-edit, L-edit programs while simulated each circuit through T-spice program
- Tested design using LVS and verified through Verilog

### Whiteboard Chat, Individual Project

May 2020, UK

- Developed interactive whiteboard platform which users can view pictures, shapes, texts and diagrams on two windows running on same machine in C++ by implementing threads, mutexes and communication protocol
- Applied project into teaching system to facilitate interactions between students and teachers
- Created gaming platform for drawing and guessing game based on whiteboard platform

### Boost Converter, Individual Project

Jan 2020, UK

- Built power supply that boosted 1.5V to up to 12.0V
- Designed and implemented embedded system controlled by serial communication on PC
- Designed and integrated closed-loop control scheme with microcontroller to monitor analogue signals and responses in real-time

### Flappy Bird Game, Team Leader

Feb 2019 – Jun 2019, UK

- Led team of 5 members to reconstruct flappy bird game using Python 2 with addition of settings that allowed users to adjust physics of game such as speed, gravity, and movement gaps
- Integrated interactive learning interfaces with fun facts in game, aiming to educate kids about gravity and forces

## SKILLS & INTERESTS

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- **Languages:** Vietnamese (native), Czech (fluent), and Spanish (upper intermediate)
- **Programming languages:** C, C++, Python, SystemVerilog, Matlab
- **Software skills:** S-edit, L-edit, T-Spice, Quartus, ModelSim, Eagle PCB CAD, Multisim, VeeCAD, Tincad, Altium Designer
- **Hobbies:** Volleyball and running