

CYRIL THOMAS

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CURRENT EDUCATION

BE (Honours) & Master of Engineering, Electrical Engineering (Year 4)

Expected graduation: Dec. 2022

The University of Queensland | Brisbane, Australia

Relevant courses: Power Systems Analysis; Digital Systems Design; Embedded Systems Design & Interfacing; Control Engineering

WORK EXPERIENCE

Research Assistant

Feb. 2021 – Present

The University of Queensland | Brisbane, Australia

- Currently working with Dr. Stephen Snow to research the effect of poor indoor air quality (IAQ) on cognitive and academic performance in high schools
- Working with schools to implement IAQ monitors to gather data and improve Queensland classrooms

Academic Tutor

July 2019 – Present

The University of Queensland | Brisbane, Australia

- Tutor PHYS1002 (electromagnetism/optics/modern physics) part-time to first year engineering and science students
- Responsible for delivering labs/marking, and fostering a positive learning environment for students

Student Consultant

Jan. 2020 – Feb. 2020

Practera | Brisbane, Australia

- Worked with an NGO (Palliative Care Queensland) to help them align with the UN Sustainability Goal
- Researched and identified key initiatives to improve their socio-economic & environmental impact by 15%

Product Testing and Development Intern

June 2019 – July 2019

Verdant Telemetry | Kochi, India

- Tested active/passive antenna & radomes specialising in airborne application
- Optimised antenna designs – Conducted low frequency (<800MHz) testing outdoors, and high frequency testing inside a noise chamber; Validated maximum antenna gains, voltage standing wave ratios, radiation patterns and axial ratios
- Exposed to blade / loop / beacon antennas and production processes; Tested and verified GPSes

Summer Research Intern

Nov. 2018 – Feb. 2019

The University of Queensland | Brisbane, Australia

- Analysed and visualized how comments made to online newspapers affect the democratic discourse in Maldives
- Built a fully-fledged website utilizing HTML, CSS and JS, and visualised over 8000 data points

Information Technology Intern

May 2017 – Aug. 2017

Pivotal Software | Toronto, Canada

- Supported an IT enterprise with over 2000 employees in the Toronto office and other worldwide locations
- Managed an IT asset life-cycle project to upgrade over 150 laptops and desktops for employees
- Deployed custom images to manage inventory; Authored documentation and manuals; Monitored Sophos enterprise security

TECHNICAL SKILLS

Languages/Kernels C, C++, Python, SQL, JS, HTML, CSS, Assembly, VHDL, FreeRTOS, Linux

Hardware STM32 & AVR microcontrollers, PCB Design, Soldering (Surface Mount & Through Hole)

Tools Unix Shell, Vim, Git, SVN, VS Code, Bash, Zsh

Other PowerWorld Simulator, MATLAB & Simulink, Altium Designer, Mathematica

SELF PROJECTS

Reactive Music Visualiser

November 2020

- Built a LED visualiser using an RGB strip and Arduino to react real-time to music based on the pitch and volume
- Utilises a Wi-Fi module to interact with Amazon Alexa and Google Assistant

The Ultimate Game Controller

July 2020

- Designed a custom input device to be used with video games
- Reports data over a USB interface using the HID protocol and supports any system that uses a standard USB controller

AWARDS / ACHIEVEMENTS

- First place – Leadership and Mentoring challenge, The University of Queensland
- President’s Scholarship of Distinction, University of Waterloo
- Third place – Problem Solving Assessment, Central Board of Secondary Education
- Shodan (Black belt), Shito-Ryu Kuwait and Kuwait Karate Federation
- Distinction in Mathematics – International Assessment for Schools, The University of New South Wales

EXTRACURRICULARS

- UQ Student Mentor (2021 – Present)
- UQ Engineering Student Leader (2020 – Present)
- Member of Robogals Brisbane (2019 – Present)
- Member of UQ Engineering Undergraduate Society (2018 – Present)
- Member of UQ Electrically Based Engineering Student Society (2018 – Present)
- Member of UQ Engineers Without Borders Australia (2018 – Present)

ACTIVITIES / INTERESTS

Internet of Things, Karate, Memes, Travel, Fitness, Tutoring, Food, Skydiving, Poker, Wireless Systems and Networks