MATTHEW YONG

Masters of Electrical Engineering | University of Melbourne

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SUMMARY

Currently a Masters of Electrical Engineering student at the University of Melbourne with a passion for building software programs and electronics. I am an avid self learner and have developed many projects in my spare time and in classes. They include Web (Front End and Back End), Mobile Applications, Cloud deployment, Object Oriented Design and Electronic Embedded Systems.

WORK EXPERIENCE

Research Assistant

UNIVERSITY OF MELBOURNE
JAN 2018 – FEB 2018

- Worked on improving parts of a robotic rehabilitation device for patients with upper limb injury.
- Creating new prototype parts using SolidWorks, a 3D Computer Aided Design program.
- Applied detailed mechanical design techniques and testing throughout prototype development.

myBurgerlab

PART TIME STAFF
MARCH 2015 – JUNE 2015

- Dealing with customer issues or complaints.
- Communicating with other kitchen staff during service.
- Expediting dishes before being served.
- Kitchen tasks such as frying and assembling.

ACADEMIC BACKGROUND

University of Melbourne
Masters of Engineering (Electrical)

JUNE 2018 – DEC 2020

- Relevant Coursework:
  - Cluster and Cloud Computing.
  - Analogue and Digital System Design.
  - Signal Processing, Control Systems and Probability.
- Member of Melbourne University Electrical Engineering Club.

University of Melbourne
Bachelor of Science – Bioengineering Systems

JULY 2015 – JUNE 2018

- Relevant Coursework:
  - Data Structures and Algorithms.
  - Basic electronic and digital system design.
  - Biosystems Design.
- Represented Melbourne's University's Ultimate team.
- Sub committee of the Melbourne University Overseas Christian Fellowship.

SKILLS

Languages: C, C++, JavaScript, Java, Python, Bash.
Tools: Git, Ansible, Docker, NodeJs, ExpressJs, ReactNative
Engineering: MATLAB, Altium, SolidWorks, Verilog.

PROJECT WORK

Link – https://github.com/relientm96

Online Code Editor

DEC 2018 – FEB 2019

C++ based C online web editor and compiler.

- Built on POCO C++ Libraries and CodeMirror.
- HTML, CSS, Javascript and Bootstrap for Front-End
- Hosted on a Windows EC2 Amazon cloud instance.
- Exposure to web application deployment and REST protocols.

Tweet Analysis Cloud Application

APR 2019 – MAY 2019

Cloud based web application to analyse large twitter data.

- Handled automation deployment of the application using Ansible, Docker and Bash Scripting.
- Performed large data (500,000 Tweets) storage and processing using MapReduce on CouchDB.
- Gained experience in Linux based operating systems.
- Collaborated in a team of five using Git and ZenHub.

Embedded Game Console

AUG 2018 – OCT 2018

Electronic game console embedded system. Printed circuit board designed on Altium Designer and programmed in C.

- Built on an ATMEGA-16 Microcontroller.
- Consisted of SPI, PWM and ADC modules.
- Picked up electronic soldering and PCB design.
- Applied engineering debugging techniques in both software and hardware.

Social Media Mobile Application

DEC 2018 – FEB 2019

React Native based mobile app for small group organization.

- Built on React Native and data storage on Firebase.
- Exposure to mobile application development.

REFERENCES

Justin Fong, University of Melbourne
Research Supervisor
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