

# Tan Yong Tat

☎ (+65) 93688499

| ✉ tanyongtat.tyt@gmail.com

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## Education

**University of Glasgow** Bsc (Hons) Computing Science :- GPA: 3.88/5.0

Sep. 2019 - Present

**Ngee Ann Polytechnic** Diploma in Networks and System Security :- GPA: 3.14/4.0

Apr. 2011 - Apr. 2014

➤ Diploma Plus Certificate in Physics

## Experience

### Network Engineer

GLOBAL CLOUD XCHANGE IS A COMPANY THAT OFFERS A COMPREHENSIVE PORTFOLIO CARRIERS, OF SOLUTIONS CUSTOMIZED FOR ENTERPRISES AND NEW OVER-THE-TOP MEDIA COMPANIES

2013 - 2014

- Tasked to manage and maintain existing network infrastructure, with the aid of network monitoring tools in a Security Ops Center environment to maintain 99.9% uptime.
- Worked with clients on new projects both local and overseas, involving site survey, liaising with network service providers, line installation and router installation.

## Projects

### Wireless Modular Tracking IOT Module

WORKED WITH SIT AS STUDENT ASSISTANT TO DEVELOP SENSOR NODES THAT USES LoRa FOR LONG RANGE WIRELESS COMMUNICATION TO BE USED IN INDUSTRY 4.0

Jan 2020

- Using both Raspberry Pi and Arduino to serve as transmitters and receivers, built from scratch a transmit and receive system that can take data from LoRa protocol and record the data into a database.

### Voice Controlled Robot Arm

BUILT IN SIT LIVING LAB, FOR OPEN HOUSE SHOW CASE, PRIMARILY FOCUSING ON AUTOMATION AND IOT

August 2019

- Using Python and google cloud API, added voice command control to a Dobot Magician robot arm. Allowing it to solve a tower of Hanoi puzzle via simple voice commands.

### Smart Shelf Project

SMART SHELF PROJECT THAT AIMS TO USE TECHNOLOGY AND AUTOMATION TO IMPROVE WORK EFFICIENCY AND ACCURACY

June 2019

- Using Flow based programming, Node-Red, Json and Javascript to enable customized controls to the shelf, built on Raspberry Pi, with IOT integration, for control of smart features.

### StopWatch and PWM Tune Player

WORKED WITH NEXYS4 FPGA, CODED IN VHDL, DONE AS A FUFILLMENT FOR A DIGITAL LAB COURSE.

July 2018

- Developed and designed the FPGA to read ASCII from a usb keyboard and generating a tone based on the input via a 3.5mm headphone jack to a small speaker. Added in a stopwatch with laptime function as bonus features.

### Machine Learning to predict Cryptocurrency Prices

DONE AS A HOBBY TO LEARN ABOUT MACHINE LEARNING AND WHAT IT CAN DO.

2017

- Obtained historical data from coinmarketcap.com to use as training and data, processed and prepared the data using pandas. Feed the data into LSTM network to attempt to generate a prediction of prices for the next month.

## Professional Certification

### Professional Scrum Master I

- ACHIEVED 95% ON ASSESSMENT

27th Dec 2021

## Technical Skills

### PROGRAMMING

**Competent** ★★★ Python

**Familiar** ★★ C,C#,C++,Java,Javascript,VHDL,Node-Red,SQL

**Learning** ★ TensorFlow, Node.js, HTML, GO