

TIMOTHY JOSHUA DY CHUA

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Work Experience

Anritsu PH - Junior FPGA Engineer

Technohub, Diliman

TECH STACK: Verilog, ModelSim, QuestaSim, Vivado

Aug 2018 – Present

- Designed modules in development of 400G Ethernet and USB 3.2 Protocol
- Worked in a team of three to implement projects
- Collaborated with teams from Japan in project development
- Participated in business trips to Japan to perform instrument testing of company devices
- Initially trained in Japan for three months to prepare for the demands of the development cycle

Computing Laboratory Student Assistant

EEEI, UP Diliman

TECH STACK:

Aug 2017 – May 2018

- Set up and configured to ready computers for laboratory use
- Debugged hardware and software problems for the laboratory computers

Laboratory Class Student Assistant

EEEI, UP Diliman

TECH STACK: Trello

Jan 2018 – May 2018

- CoE 134 Software Engineering
- Assisted Professor Nestor Tiglaog in handling of 20 students
- Prepared activities, reports and presentations

Engineering Intern

Sparklab Innovation Center

TECH STACK: Circuit Soldering, C, Circuit Design

Jan 2018 – May 2018

- Constructed a system of speakers that are motion activated
- Vocalisations: A soundscape in Greenbelt Park by Teresa Barrozo

Education

UP Diliman, CUM LAUDE

Diliman, Quezon City

B.S. Computer Engineering

June 2013 – June 2018

- Relevant Coursework: CS 180 Artificial Intelligence, EEE 11 Programming Fundamentals, CoE 134 Software Engineering, EEE 13 Programming Applications in Electrical and Electronics Engineering
- University Scholar 1st Semester of AY 2017-2018

Projects

Hardware Accelerated Vehicle Detection Using Computer Vision for a Dynamic Traffic System

TECH STACK: Python, C++, C#, TCP, Vivado HLS, Raspberry PI, Zynq 7000 FPGA

- Integrated Computer Vision and Vehicle Traffic Simulation using SuMO
- Implemented Computer Vision on Raspberry Pi using OpenCV
- Used SVM and Histogram of Oriented Gradients Feature Extraction
- Team Leader in a group of three

Seminars

Singapore AI Summer School

NUS, Singapore

TECH STACK: Deep Learning, NLP, CV, Reinforcement Learning

July, 2019

- Learned about state of the art techniques and current problems of deep learning for a week
- Participated in a workshop, "Ocean Protocol & Connected Life"
- <https://medium.com/p/afcc08a96376/edit>

