Fu Yong Quah
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Twitter, Github, Linkedin: fyquah95

Final year Electronic and Information Engineering undergraduate at Imperial College London, United Kingdom.

Skills

FPGA Design SystemVerilog, Maxcompiler, Vivado HLS, Quartus, Resource and Performance Modelling

Programming OCaml, C++, Python, Clojure, Java

Environment Developing and shell scripting in Unix-based environment

Education

2014 - 2018 **Imperial College London, London, UK**
MEng. Electronic and Information Engineering
First class, Dean's List
Computer Architecture, Control Engineering, Computer Vision, Simulation and Modelling, Operational Research, Mathematics, Language Processors

2013 – 2014 **INTI International College Penang, Penang, Malaysia**
Cambridge GCE A-Levels: 4A* in Mathematics, Further Mathematics, Physics and Chemistry.

Professional Experience

04/2017 – 09/2017 **Jane Street Capital - Software Engineering Intern**

07/2016 – 09/2016 **Google Inc - Software Engineering Intern**
- Deploy python static analysis tool (github.com/google/pytype) to code review tool.
- My work was used to run program analysis Borg, pytype and an internal tool.
- Worked with pytype and bazel, in python and java

06/2015 – 08/2015 **Netcraft Ltd – Internet Service Developer Intern**
- Worked primarily on a classification project of hosting companies
- Automated data collection and validation using Perl, Bash scripts and Cronjobs.
- Improve and maintain a web interface for manual data labelling (Perl/CGI/MySQL)

Projects

01/2017 - 03/2017 **fpgaConvNet on Maxeler**
- Map convolutional neural networks to FPGA using maxcompiler.
- Optimized design with logic units, BRAM, DSP and performance mathematical models.

01/2016 - 03/2016 **Self-Hosting C Compiler**
- Implement a turing complete portion of a C to MIPS compiler
- Written in C, flex and bison, extensively using classic C dynamic-dispatch techniques

05/2015 – 06/2015 **Real-time Autofocus for FPGA** *[link: https://youtu.be/UJXkHhFQPak]*
- Developed an algorithm to carry out autofocus with FPGA via edge detection.
- Written in C++ using High Level Synthesis with Verilog HDL.

Awards

2016 **NUS Data Science Challenge -** Grand Prize
PennApps – Grand Prize (http://technical.ly/philly/2016/01/25/scary-hardware-hack-won-pennapps-ramear/)

2015 **Head of Department Prize –** Top student in first year Electronic and Information Engineering
Won **Grand Prize** in the **Fishackathon,** sponsored to attend **World Mobile Congress 2016**
Won **Grand Prize** in the **Imperial Bitcoin Forum**

2014 **King's Scout** title (Eagle Scout equivalent)
Represented Malaysia in the **International Olympiad in Informatics (IOI)**

Languages

English, Chinese (Mandarin), Malay