

Andrew Yan

✉ andrew.yan@alumni.ubc.ca ☎ (778)-996-4600 🖱 andrewyan.ca in andrew-yan

Professional Experience

MDA

Nov 2021 – present | Montreal, Canada

VHDL Designer | Satellites ☑

- Project 1
 - Designed 6 modules in VHDL that succeeded passed verification checks and labs testing
 - Added radiation protection to 6 modules drastically reducing the effect of single-event upsets
 - Created software to intelligently merge coverage reports of all modules, saved 30 minutes of manual work every run
- Project 2
 - Designed a module in VHDL that intelligently chooses data from 4 streams using a priority system and a secondary round robin system
 - Set up a Versal FPGA in the lab to test RTL
- Project 3
 - Created script in Python to simulate design logic to properly validate RTL functionality on the FPGA
 - Wrote a script to write to registers and validate the FPGA's response systems

Kardium

Jan 2019 – Aug 2019 | Vancouver, Canada

Electrical Engineer Intern | Globe Atrial Fibrillation Device ☑

- Created testbenches in VHDL to test the digital logic of various features of a product, resulting in the successful identification of bugs
- Triaged and developed creative solutions in VHDL to correct bugs found through testbenches
- Performed testing on a specific feature of a product, which was used with other data to verify the design
- Designed a script in Python to perform an analysis of the errors and warnings from a VHDL build, allowing for the ability to ensure that the design met specifications.

Intel

May 2018 – Dec 2018 | Vancouver, Canada

ECC RTL, Software, FPGA Intern | Non-Volatile Memory

- Designed error correction RTL in Verilog and SystemVerilog to correctly encode and decode to the specifications of future products
- Created software in C to be used in combination with SystemVerilog testbenches to improve debugging of the error correction RTL

Education

M. Eng, Biomedical Engineering

Sep 2020 – Aug 2021 | Vancouver, Canada

The University of British Columbia

- Participated in Engineering in Scrubs, a program innovating in the biomedical electrical engineering space

BASc, Electrical Engineering

Sep 2015 – May 2020 | Vancouver, Canada

The University of British Columbia

- Lead Biomedical Engineering Student Team through various projects
- IEEE EMBS Division Student member
- Created Enclosure for Single Cell Inkjet Printer, winning 2nd Place Capstone ☑

Skills

VHDL | Verilog | SystemVerilog | Shell Scripts | C | Python