# **Ariel Laboriante**

**Electrical Engineering** 

#### **SKILLS**

#### Languages

C/C++ Java Verilog VHDL

HTML/XML CSS

JavaScript

#### Software Tools

Visual Studio Express Vivado HLS Vivado Design Suite ModelSim PosPac MMS Optech LMS **Polyworks MATLAB Eclipse** Cadence Synopsys PSS/E PSIM **BSL PRO** LabVolt DAC-EMS **PSPICE OrCAD** Oxygen XML Editor

#### **EXTRACURRICULAR**

MS Project

#### York Faculty Committee

Student representative for LCS (Learning, Curriculum & Students)

# Excel lassonde - YorkU

Volunteer tutor

#### IBM Future Blue Day

Team leader

# IBM Campus Tour

Student ambassador

#### JA Central Ontario

Workshop facilitator

#### **WORK EXPERIENCE**

#### FPGA Developer - Teledyne Optech

May 2018 - Dec 2018

- Developed FPGA firmware for airborne and ground-based lidar products
- Specialized in high level synthesis targeting the Xilinx FPGA in a Vivado environment
- Worked on code restructuring and using directives to optimize the area and latency
- Responsible for design, analysis, simulation, implementation, and testing of firmware
- Participated in the collection of specifications and preparation of documents

### Content Designer for Db2 – IBM Canada

May 2016 - Aug 2017

- Updated official web documentation for IBM software products in XML
- Rapidly learned software design concepts of Db2 LUW, Db2 for z/OS, BigInsights, and Db2 on Cloud to communicate features with a development audience
- Managed documentation repositories and tested site builds; debugged DITA files and troubleshoot technical issues with internal documentation software
- Organized and hosted knowledge transfer classes for new hires
- Successfully met deadlines and workflow in agile software development life cycle

## Research Assistant - York University

May 2015 – Aug 2015

- Contributed to the YorkU Spacecraft Dynamics Control and Navigation laboratory
- Collaborated with a team of graduate students in developing an airborne 2D-imaging Fabry-Perot spectrometer system for the Earth and Space Science & Engineering
- Gathered technical specifications for project components and power supply
- Reviewed standards for reducing EM radiation and prepared reports for scrums

### **EDUCATION**

Honours Bachelor of Engineering - Electrical Engineering York University, Toronto

Expected June 2019

#### **AWARDS**

- First place in Coolest Hack Category at ElleHacks Major League Hacking 2018
- Certified Database Associate for IBM Db2 10.1 2017
- Recipient of the Lassonde Scholarship (\$80,000 value) YorkU 2013
- Member of the Dean's Honor Roll YorkU 2014

### PROJECTS (ariellaboriante.github.io/#projects)

Capstone project - Indoor UAV navigation using photogrammetry and image processing York campus power system - Power flow analysis and microgrid simulation in PSS/E Opamp design - Redesigned a two-stage opamp in Cadence for performance and met specifications (gain, bandwidth, phase margin, input common mode range, slew rate) ECG prototype - Built a working electrocardiogram on breadboard and tested on a subject