

JANUJAN SELVARATNAM

A driven problem solver with a passion for connected technologies.

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SKILLS

Programming C • C++ • C# • Matlab • Python • SQL • HTML/CSS

Technologies Git • Django • Heroku • PostgreSQL • Bootstrap • Excel

Personal Skills Communication • Leadership • Project Management

EXPERIENCE

Analog Engineering Intern

Peraso Technologies

Sept 2017 – Dec 2017

Toronto, Canada

- Developed Matlab scripts to interface with chipset and record thousands of IC parameters and analyze part-to-part variance
- Increased yield of products by **50 %** and reduced test time by **75 %**
- Built GUI to reduce human error during in-house qualification of chipsets
- Worked with DSP team to validate power improvements with updated firmware settings

RF Engineering Intern

Peraso Technologies

January 2017 – April 2017

Toronto, Canada

- Developed and tested driver settings to configure new chipset states and transitions for test codebase
- Characterized IC system level performance using Matlab and Excel
- Analyzed and updated data across products for scheduled data sheet releases

DSP Researcher

Cognitive Systems Corp.

May 2016 – Aug 2016

Waterloo, Canada

- Developed driver code to implement frequency offset algorithm in C
- Created test framework to validate algorithm performance using Python
- Designed data visualization tool of carrier frequency offset map using Matlab

Sensor Design Intern

BlackBerry Limited

Sept 2015 – Dec 2015

Waterloo, Canada

- Performed characterization of BlackBerry Radar sensor board for ranging
- Tuned TOF Sensor for optimal performance in various environments
- Developed a C# Desktop Application to interface with sensor board and collect data

EDUCATION

BASc. Electrical Engineering,
Honours Co-op

 **University of Waterloo**

Sept 2013 – June 2018

- IOT Processing • Embedded Systems
- OOP • Probability Theory
- Algorithms and Data Structures

PROJECTS

NBA MVP Tracker

Django • PostgreSQL • Heroku

Dec 2018

Developed a real time web app to display NBA MVP rankings and handle API requests.

Raksha

Arduino • C++ • Twilio API

Jan 2018 – April 2018

Developed firmware for data aggregation and communication with server back-end.

Lyricize

Django • NLTK • Genius API

Jan 2019

Developed a Django web-app to analyze and present song data using NLTK.

Personal Website

Bootstrap • HTML/CSS • Javascript

Dec 2018

Created a personal website using Bootstrap and HTML/CSS.

EXTRACURRICULARS



ECE Design Days Volunteer

Mentored first year students at design competition



Team Member

Intramural basketball at uWaterloo