

Janujan Selvaratnam

A driven problem solver with a passion for connected technologies.

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SKILLS

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

Technologies Git • Django • Heroku • PostgreSQL • Bootstrap • REST

Management Communication • Leadership • Agile • Critical Thinking

EXPERIENCE

System Evaluation Developer

Peraso Technologies

Sept 2017 – Dec 2017

Toronto, Canada

- Developed scripts to fully characterize base-band chipset in Matlab
- Tracked thousands of IC parameters to improve product yield by 50%
- Built GUI to reduce human error during in-house qualification of chipsets
- Validated power consumption improvements with updated firmware settings using C

RF Engineering Intern

Peraso Technologies

January 2017 – April 2017

Toronto, Canada

- Developed and tested driver settings to configure new IC state/transition for production testing using C
- Created a Python tool to normalize datasheet visualization for eval team
- Characterized system level performance of radio IC using Matlab
- Analyzed and updated data across products for data sheet releases

Embedded Software Developer

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 full characterization of BlackBerry Radar sensor board
- 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**

2018

Waterloo, Canada

- Algorithms and Data Structures
- OOP • Embedded Systems • IOT
- Probability & Statistics • Control Systems

PROJECTS

NBA MVP Tracker

Django • PostgreSQL • Heroku

Dec 2018

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

Social Development Wearable

Arduino • C++ • Twilio API

Jan 2018 – April 2018

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

Lyricize

Django • NLTK • Genius API

Jan 2019

Developed a web app to analyze and present lyric metrics using NLP principles.

Personal Website

Bootstrap • HTML/CSS • Javascript

Dec 2018

Created a personal website to showcase portfolio and hobbies.

ACHIEVEMENTS



Photography

Shots featured on Spotify, Apple Music and radio promo campaigns.



Basketball Champions

Intramural basketball champions at the University of Waterloo.