

# Janujan Selvaratnam

*A driven problem solver with a passion for connected technologies.*

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## SKILLS

### Programming

Python • C++ • C# • Javascript • Matlab • SQL

### Frameworks

Django • Express • Bootstrap • Node.js • ASP.NET

### Technologies

Git • Heroku • PostgreSQL • MongoDB • Pug • 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# .NET 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.

### Playlist Analyzer

**Express • Javascript • Spotify API**

Jan 2019

Developed a web app that analyzes audio features of each track in Spotify playlist.

### 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.