# Yanushka Gnanamuttu, EIT

## Contact

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## **About**

Seeking Full Time Software Developer Position

Interested In: RTOS, Autonomous Systems, and Algorithm Implementation

## Skills

## Languages

• C/C++

- Javascript
- Python
- Bash

#### Platforms/Tools

- Git
- Linux
- ROS
- CMake
- OpenCV
- Clang
- Boost
- Jenkins

## Education

University of Ottawa BASc. in Computer Engineering Sept. 2015 – Apr. 2019

## **Activities**

- Rock Climbing
- Canoeing & Camping
- Violinist

## Work Experience

## Software Developer

Sensors & Software, Mississauga | May 2019 - Present

- Developed applications, tools and processes to deploy and configure ground penetration radar (GPR) software
- Deployed sensor information over various interfaces such as I2C, TCP/IP and CAN
- Designed and implemented many features for the next release of the GPR data processing software
- Worked directly with the project management team to solve engineering problems

#### Software Analyst Intern

Thales R&T, Toronto | May 2018 - Aug. 2018

- Assisted with the implementation of autonomous train positioning solutions and vehicle detection
- Improved the performance of the vision code through multithreading and targeting the GPU
- Enhanced the image quality of the camera, and implemented real-time adaptive lighting

# **Projects**

Real Time Object Tracking (4<sup>th</sup> Year Research Project)

Python, C++ | Sept. 2018 - April 2019

- Researched and implemented technologies for neural networks (YOLO) to be used on a Jetson platform for real time object tracking
- Optimized the neural network, generating an 8x performance speed-up from the use of the GPU
- Utilized the Jetson's camera through GStreamer and OpenCV

#### RoboBoat

ROS, Python, XML | Jan. 2017 - April 2019

- Co-founder of the Ottabotics robotics team
- Developed an autonomous robotic boat that can navigate through challenges using sensor data
- Created sensor nodes for the GPS, IMU and temperature sensors