


TAMER SHERIF

Email: tsher024@uottawa.ca | **Website:** tamersherif.com | **GitHub:** <https://github.com/TamerSherif>

Technical Languages: Python, Java, JavaScript, Ruby, C++

Skills Technologies: React JS, Angular JS, NodeJS, Caffe, Flask, TensorFlow, OpenCV, Matplotlib

Work History  **Machine Learning & IoT Engineer (Intern) | IBM, Toronto** **May 2017 – Sep 2017**

- Single handedly designed and developed the pipeline for a video and image analysis web app used to detect different vehicle types. Used SSD300 which is six times faster than previous faster RCNN neural net architecture (ReactJS, NodeJS, Caffe, Python, Flask, OpenCV, Matplotlib)
- Wrote scripts to automate and optimize the machine learning (ML) model's dataset handling, training and testing (Python, Caffe, OpenCV)
- Designed a POC dashboard for tracking and displaying truck information (truck temperature, location and time) from a raspberry Pi embedded system (AngularJS, ChartJS, NodeJS, Python)



Software Developer (Intern) | BlackBerry, Waterloo **Sep 2016 – Dec 2016**

- Debugged enterprise databases integrated with BlackBerry's cloud (MS SQL, Ruby on Rails)
- Developed a plugin using Google's APIs to improve productivity for support services (JS)
- Performed testing, and fixed backend bugs all while optimizing BES management console interface (Ruby on Rails, AngularJS)



Cybersecurity & Backend Engineer (Intern) | SSC, Ottawa **Sep 2016 – Dec 2016**

- Configured appliances including FortiGate and Cisco ASA firewalls, HPE ArcSight and IBM QRadar SIEMS, HP Edge and Juniper switches in government data centers (Linux RedHat)
- Authored and compiled the Canadian government's FortiNet FortiGate firewall build book, which covered every important aspect of the FortiGate firewall (HA, VPN, SNMP, etc.)

Projects **LilyBot MD (Hack the North):** Developed a ML classification model to detect diabetic retinopathy from retinal image scans. Integrated the model with a conversational AI implemented on Facebook and Skype. Received IBM API honourable mention (MS Bot, IBM Watson API, Python)

SignAlert (Hack Princeton): Spearheaded the development, training and deployment of an SSD based ML model for real-time street sign detection and text to speech warnings (Python, OpenCV)

Broadband Antireflection Coating: Designed the most effective and efficient solar cell for optimal power production through manipulating and examining the effects of design parameter changes (such as the number of antireflection coating layers, the material's thickness, refractive indices and the sun's spectral composition) (MATLAB)

Extra-Curricular **Hackathons & Challenge Problems:** Involved in hackathons (Hack the North & Hack Princeton) and online coding problems

Start-up Involvement: Passionately involved in two entrepreneurial ventures

Self-directed Learning: Used Udemy and Coursera to supplement my love for development

Education **BASc Computer Engineering (Co-op), 3rd Year, CGPA: 3.7 | University of Ottawa, Canada**