# **EDWARD REN**

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### **SKILLS**

Python, JavaScript, C++, Swift, C, Visual Basic, HTML/CSS, Java, C#, Bash Languages **Tools** Node.is, Diango, React.is, Docker, Git, Keras, Ubuntu, Xcode, MongoDB

## **EXPERIENCE**

Blackberry - QNX Ottawa, Ontario Software Engineering Student - Open Source May 2018 - August 2018

Initiated dockerized licensing system with **Diango** to streamline certifications, cutting time-spent by 90%

- Designed weighted association rule machine learning classifier to reduce false positives in open source software licensing prediction model by 30%
- Built data pipeline in Luigi aggregating 40k entries to train models in batch processes
- Integrated microservice architecture using Kafka streams achieving latency reduction in inter-application communication by 95%+
- Implemented scalable search indexing with elasticsearch to visualize analytics intelligence

**WATonomous** Waterloo, Ontario October 2017 - August 2018

Full-Stack Development Lead (www.watonomous.ca)

- Led the development of the main WATonomous website with React.js with 2000+ monthly visitors.
- Constructed backend server with Node.js and Express.js to process file transfers with MongoDB
- Initialized deployment and integration of a Diango-based applicant interface for 300+ users
- Containerized production site in **Docker** with SSL and Nginx optimization for 300% speedup

Ciena Corporation

Ottawa, Ontario July 2016 - August 2016

**Embedded Software Intern** 

Used hierarchical meta-data to classify and detect anomalies in external packages with Visual Basic improving compliance efficiency by 200%

- Crawled remote package repositories to predict URLs for 2100+ licenses from 80+ sources
- Designed section of Ciena's intranet with **Angular** and **D3.is** to display weekly data for analysis

### **PROJECTS**

**Recycle Can** – Creator and Developer (www.recyclecan.ca)

June 2017 - December 2017

- Assembled built-in real-time iOS navigation app with over 18000+ lifetime users using Swift to guide users to the closest electronic waste recycling centre
- Constructed website supporting Google Maps API using React.js accepting 1500+ peak monthly visits

**HeartBit** - Developer - Hack The North (www.github.com/EdwaRen/heartbit)

July 2017 - August 2017

Developed coaching app that tracks emotions with **OpenCV** and **Tensorflow** to improve user confidence

## **ACHIEVEMENTS**

HeartBit - Canadian Special Forces winning hack (2018)

Recycle Can - Featured nationally on Metro News (2017)

University of Waterloo President's scholarship of distinction (2017)

International Baccalaureate Diploma (2017)

SHAD Alumnus - University of Saskatchewan (2016)

#### **EDUCATION**

**University of Waterloo** 

2017 - April 2022 (Expected)

Candidate for Bachelor in Software Engineering