# **EDWARD REN**

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# **SKILLS**

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

## **EXPERIENCE**

Blackberry - QNX

Ottawa, Ontario

Software Engineering Student - Open Source

May 2018 - August 2018

- Initiated dockerized licensing system with Django to increase certification efficiency by 1000%
- 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

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

October 2017 - August 2018

- Led 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 into MongoDB
- Initialized deployment and integration of a **Django**-based applicant interface for **300**+ users
- Containerized production site in **Docker** with SSL and **Nginx** optimization for **300**% speedup

#### Ciena Corporation

**Embedded Software Intern** 

Ottawa, Ontario July 2016 - August 2016

- Used hierarchical **tree** structure of meta-data to classify and detect licensing anomalies in external open sourced 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** to display weekly reports of data intelligence

## **PROJECTS**

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

June 2017 - December 2017

- iOS and web navigation tool that guides users to the closest electronic waste recycling center
- Assembled built-in real-time navigation app with over 18000+ lifetiime users using Swift
- Constructed website supporting Google Maps API using React.js accepting 1500+ peak monthly visits

**Team Goals** - Creator and Developer (www.teamgoals.ml)

July 2017 - August 2017

• Public goal sharing **React.js** app to effectively communicate tasks between a team in real time

## **HONOURS & AWARDS**

- 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

## **EDUCATION**

**University of Waterloo** 

2017 - April 2022 (Expected)

Candidate for Bachelor in Software Engineering