

EDWARD REN

e2ren@edu.uwaterloo.ca
www.github.com/EdwaRen
www.edwardren.me

SKILLS

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

EXPERIENCE

Blackberry - QNX

Software Engineering Student - Open Source

Ottawa, Ontario
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 interapplication communication by **95%+**
- Implemented scalable search indexing with **elasticsearch** to visualize analytics intelligence

WATonomous

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

Waterloo, Ontario
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+** lifetime 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