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, MongoDB

EXPERIENCE

Blackberry - QNX   Ottawa, Ontario
Software Engineering Student - Open Source   May 2018 – August 2018
- Spearheaded 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 display analytics intelligence visualization

WATonomous   Waterloo, Ontario
Full-Stack Development Lead (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 synchronously process resume transfers into **MongoDB** on Ubuntu
- Initialized deployment and integration of **Django** management system with member signups as a user-friendly admin interface with PostgresSQL
- Containerized production site in **Docker** with SSL and **Nginx** optimization for **300%** speedup

Ciena Corporation   Ottawa, Ontario
Embedded Software Intern   July 2016 - August 2016
- Used hierarchical **tree** structure of file meta-data to classify and detect licensing anomalies in external open sourced packages with **Visual Basic** improving compliance efficiency by **200%**
- Algorithmically generated URLs with exception detection 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 (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 using **Swift** with over **18000+** users on **iOS** featuring automatic route plotting from geographical data
- Constructed website supporting mobile features with **React.js** accepting **1500+** peak monthly visits
- Collected **11000+** database entries with custom web data mining tools from **30+** sources

Team Goals - Creator and Developer (teamgoals.ml)   July 2017 - August 2017
- Public goal sharing web app to effectively communicate tasks between a team in real time
- Assembled using **React.js** with backend support powered by **Redux** with data persistency on **Firebase**

HONOURS & AWARDS

- Recycle Can project featured nationally by Metro News (2017)
- University of Waterloo President's scholarship of distinction (2017)
- International Baccalaureate Diploma (2017)

EDUCATION

The University of Waterloo   2017 – April 2022 (Expected)
Candidate for Bachelor in Software Engineering

Interests	Skiing, Hiking, Speedcubing, Debate, Rock Climbing, Trivia