EDWARD REN

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SKILLS

Languages Python, JavaScript, C++, Swift, C, Visual Basic, HTML/CSS
Technologies Node.js, Django, React, Docker, Git, TensorFlow, Xcode, MongoDB, SQL

EXPERIENCE

Blackberry - QNX Ottawa, Ontario
Software Engineering Student - Open Source *May 2018 – Aug 2018*
- Initiated Dockerized licensing system with **Django** to streamline certifications and cut time spent by 90%
- Designed association rule **machine learning** classifier to reduce false positives in licensing model by 30%
- Pipelined batch database queries in **Luigi** to train models and support aggregation of 40,000+ tasks
- Integrated microservices to existing software stack with **Kafka** data streams to reduce latency by 95%+
- Implemented scalable search indexing with **Elasticsearch** to visualize and deliver analytics intelligence

WATonomous Waterloo, Ontario
Full-Stack Development Lead (watonomous.ca) *Oct 2017 – Aug 2018*
- Created autonomous vehicle team's website in **React** and **Express.js** to serve 2,000+ monthly visitors
- Containerized production site in **Docker** with SSL and **Nginx** to trim page rendering times by 60%
- Developed applicant back-end server with **Node.js** and **MongoDB** to handle text and resume uploads
- Deployed **Django**-based applicant interface with continuous integration to administer 300+ users

Ciena Corporation Ottawa, Ontario
Embedded Software Intern *Jul 2016 – Aug 2016*
- Rectified licensing inconsistencies using tree traversal algorithms in **Visual Basic** to classify 50% of tasks
- Mass crawled remote repositories in **Python** to obtain URLs for 2,100+ licenses from 80+ sources
- Revitalized department's homepage with **React** and **D3.js** to graphically display weekly data for analysis

PROJECTS

HeartBit - Developer at Hack The North (*github.com/EdwaRen/heartbit*) Sept 2018
- Built biometrics analytics app using image processing in **OpenCV** and **TensorFlow** to monitor anxiety

Recycle Can - Creator and Developer (*recyclecan.ca*) Jun 2017 – Dec 2017
- Architected real-time iOS navigation app with 18,000+ lifetime downloads using **Swift** to guide users to the closest electronic waste recycling centre
- Constructed companion website in **React** with Google Maps API to deliver 1,500+ peak monthly visits

ACHIEVEMENTS

HeartBit - Canadian Special Forces (CANSOFCOM) winning hack 2018
Recycle Can - Featured nationally on *Metro News* 2017
ACT Score of 35/36 - Ranked 99th percentile in North America 2016
SHAD Fellow - University of Saskatchewan 2016

EDUCATION

University of Waterloo - *Bachelor in Software Engineering* *Sept 2017 – Apr 2022*

INTERESTS

Cross country, Blitz chess, Speedcubing, Skiing, Swimming, Hiking, Quizbowl trivia