

Edward Ren

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Languages Python, SQL, JavaScript, C++, C, R, HTML/CSS, Visual Basic
Technologies Pandas, PySpark, MongoDB, scikit-learn, Docker, Node.js, NumPy, Git, React

Experience

TextNow Waterloo, Ontario
Full Stack Developer September 2019 – December 2019 (Expected)

- Created internal privacy tool with Ruby on Rails to allow admins to create a contact block between users

IBM Calgary, Alberta
Cognitive Software Developer - Advanced Analytics January 2019 – April 2019

- Delivered **RandomForest** and **Adaboost** models to predict product activation rates with 90%+ accuracy
- Applied data preprocessing using **NLP** imputation strategies on 150 million+ dataframe rows
- Created pipeline for partitioned **PySpark** dataframes to boost writes to S3 by 75% to 250k rows/second
- Parallelized merging and iterative operations in **Pandas** across 12 cores to speed up computations by 30%

Blackberry Ottawa, Ontario
Software Engineering Intern - AI in Open Source May 2018 – August 2018

- Developed **Dockerized** package regulatory system with **Django** to cut time spent on certifications by 95%
- Designed **association rule** learning model to reduce false positives in licensing conflict predictions by 30%
- Implemented scalable search indexing with **Elasticsearch** to manage analytics on 21 million commits

WATonomous Waterloo, Ontario
Full-Stack Lead - watonomous.ca October 2017 – August 2018

- Led creation of autonomous vehicle team's website in **React** and **Express.js** to serve 5000+ monthly visitors
- Wrote back-end server with **Node.js** and **MongoDB** to handle text and resume file uploads

Ciena Ottawa, Ontario
Open Source Software Intern July 2016 – August 2016

- Detected licensing inconsistencies using tree traversal algorithms in **Visual Basic**, classifying 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

Coffee N' Code - Data Science Lead 2019

- Led tutoring of models including decision trees, random forests, and Adaboost for sessions of 50+ members

HeartBit - CANSOFCOM Winning App at Hack The North (github.com/EdwaRen/heartbit) 2018

- Built biometrics analytics app using image processing in **OpenCV** and **TensorFlow** to monitor anxiety

Recycle Can - Creator and Lead Developer (recyclecan.ca) 2017

- Architected iOS and web navigation app with 18,000+ downloads to guide users to nearby recycling centres

Education

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

- ACT Score of **35/36**, ranked 99th percentile

Interests

Skiing, Blitz chess, Speedcubing, Rock climbing, Hiking, Quizbowl trivia