

Edward Ren

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Languages Python, C++, Ruby, Java, GraphQL, JavaScript, SQL, Elixir, Scala, C, Bash
Technologies Django, Rails, Kafka, Docker, Redis, Spark, Node.js, React, Datadog, MongoDB

Experience

Shopify / Orders Backend Developer Ottawa (Remote), Jan 21 – Apr 21

- Highly optimized draft order creations using **Ruby** attribute schemas to pre-validate inputs and cutting response time by up to **80%** for orders traffic accounting for **15%** of all gross merchandise volume (GMV)
- Defined **GraphQL** endpoints to update overdue dates upon sending an invoice for orders
- Developed dashboards in **Datadog** by tagging low cardinality payment metrics from **GraphQL** requests

Postmates / Merchants Backend Developer San Francisco (Remote), May 20 – Aug 20

- Redesigned payments pipeline in **Django** to individually label aggregated fees for 14,000+ shops
- Created API endpoint in **Elixir** to independently update menu items, cutting compute bottleneck by 40%
- Defined Avro schema generation tools to migrate **Kinesis** logs to **Kafka** events in **GCP**

TextNow / Internal Tools Developer Waterloo, Sept 19 – Dec 19

- Developed job scheduling system in **Ruby** to remove inactive phone plans and saving \$2000 monthly
- Implemented RESTful API in **Ruby** to support parent-child user relationships in subscription payments
- Rerouted device tracking service in **React** by batching API calls to **Redis** to cut load speed by 90%

IBM / Advanced Analytics Software Developer Calgary, Jan 19 – Apr 19

- Designed pipeline to transfer partitioned **Spark** dataframes to IBM **Cloud S3**, leading to 75% faster writes
- Parallelized Pandas merging operations with Dask to speed up business analytics computations by 30%
- Tuned **scikit-learn** Adaboost classifier as part of a first of a kind AI mineral deposit prediction model

BlackBerry QNX / Open Source Software Engineering Intern Ottawa, May 18 – Aug 18

- Developed **Dockerized** package regulatory system with **Django** to cut time spent on certifications by 90%
- Implemented text searching service with **Elasticsearch** to manage analytics on 21 million commits

Projects

CHEO Engagement Simulator / InternHacks Winner 2021

- Developed platform using **JavaScript** and **H5P** for informative interactive videos in hospital training

WATonomous / Team Website and Backend / Web Lead / React, Express.js 2017-2019

HeartBit / Biometrics Analytics App / Hack The North Winner - CANSOFCOM (Git) 2019

Recycle Can / Creator and Developer (recyclecan.ca) (Git) 2017

- Developed eco-navigation app in **Swift** with 18,000+ downloads to guide users to recycling centres

Education

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

- **GPA: 3.9/4.0** (Third year) | 2x Deans Honours List recipient | ACT: **35/36**, 99th percentile
- **Courses:** Relational Databases, Algorithms, Concurrency, Data Structures and Data Management

Interests Skiing, chandlery, blitz chess, card magic, speedcubing, bouldering, Ed Sheeran's music