

simon fan

developer and creative



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EXPERIENCE



shopify

developer intern - home platform team
rails, mysql, graphql, analytics.js, google analytics

fall 2016 - present

- abstracted many of core's rails Active Models, exposing home as a platform agnostic api
- instrumented the home feed using analytics.js to enable funnel analysis on merchants
- built an interface for dynamic content creation, removing overhead from developers
- fixed production disruptions, and code reviewed home related pull requests
- earned the best possible score on my performance evaluation



CI Investments

programmer analyst intern - shareholder systems team
java, sybase, d3.js, flot.js, jquery, google analytics

winter 2016

- main developer on a KPI analytics platform for the fund marketing team of 10
- built dataset filters to query multiple subsets from multiple tables up to 17 million rows
- tuned queries to run up to 80% faster by denormalizing, indexing, and using lookup tables
- aggregated ~20 million rows monthly from ~10TB of data across 3 databases
- extended 15 flot.js features to incorporate d3.js features for powerful interactivity



METRICwire

developer intern - web platform team
node.js, mongodb, express, angular.js, giftbit api

summer 2015

- contributed to the HIPAA compliant platform for researchers and their users
- refactored web portal's local storage bindings, 10x less data stored, 15% faster on average
- conceived and owned the front-end and back-end development of the rewards program
- won internal demo day, hosted as a feature competition between the 6 interns
- designed and built a user friendly researcher portal landscape interface
- implemented and fixed various features, along with the accompanying migrate scripts



INVOLVEMENTS



Tech Retreat

founding organizer

winter 2014 - present

- first annual highschool learnathon and hackathon in Canada
- coordinated logistics and sponsorships for 300 attendees



ACE

Ace Consulting Group

associate

fall 2014 - summer 2015

- prepared research deliverables for clients HearthStats and Vitameter
- organized logistics for various startup networking events



enactus

University of Waterloo

Enactus Waterloo

founding vp finance

fall 2014 - summer 2015

- built the foundation for the club's accounting, sponsorship teams
- ranked top 16 in Canada within months of inauguration



Brébeuf Model United Nations

delegate

fall 2012 - summer 2014

- dedicated ~600 hours to research, speech writing, fundraising
- received *Outstanding Delegation* award at NMUN - New York 2014
- awarded *Best Delegate* at Montreal 2013, and McGill 2014



EDUCATION

fall 2014 - winter 2019



University of Waterloo

Bachelors of Computer Science, co-operative program
upper-year mentor, orientation leader, TerribleHack organizer



SKILLS

ruby	rails	d3.js
java	node.js	three.js
javascript	flask	matplotlib
c++		
python		
bash	jquery	mysql
racket	socket.io	mongodb
lua	express	sybase
atom	git	photoshop
vim		illustrator



PROJECTS

TechTanks

rails, resque, redis, paper.js

programming game; teaching ruby and AI basics to high school students through paper.js rendered cannon powder

geovibes

three.js, flask, Microsoft Cognitive Services
news visualizer; 3D globe visualization of batch processed journalist sentiments, providing an overview of recent international news articles

OpenSpace: Cassini module

OpenSpace, NASA SPICE data, lua
space simulation; built the Cassini module from Earth to Saturn, and mapped NASA SPICE data timestamps to corresponding OpenSpace scenes

watchr (most socially impactful prize)
node.js, android, socket.io

crisis management platform; log suspicious sounds using people's phones, cluster sound events by time and geolocation to backtrack origin and send evacuation routes

more on