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EDUCATION

Fall 2014 -
Winter 2019

University of Waterloo

Bachelors of Computer Science, co-operative program

Course topics I enjoyed a lot:

feature learning, classification, graph algorithms,
distributed systems, logic, financial modeling

EXPERIENCE



Data Science Intern

time series analysis, ipython, matplotlib, AWS

Summer 2017
New York City, NY

- analyzed and extracted features from time series data for causal structure learning
- developed, over 3 months, a time series discovery tool allowing ranked similarity search, currently used internally to reduce manual incident discovery times by 50%
- fully replicated, using the tool, results of 10+ application performance postmortems



Software Engineering Intern - Web Platform

rails, python, mysql, graphql, analytics.js

Fall 2016
Ottawa, ON

- unified merchant home feed rendering flow by abstracting 100+ rails classes, reducing the number of components by 90% and improving code readability
- instrumented the merchant home feed, enabling funnel analysis on navigation patterns
- demoed a prototype shopping bot classifier, which led to a new full time project



Programmer Analyst Intern - Shareholder Systems

java, sybase, d3.js, flot.js, jquery

Winter 2016
Toronto, ON

- developed an application to visualize KPIs for the fund marketing team
- architected the database model and implemented its corresponding ETL pipeline
- designed and implemented a user friendly query interface supporting all T-SQL joins
- extended 15+ flot.js features to incorporate d3.js features for more powerful interactivity



Software Engineering Intern

mongodb, express, angular.js, node.js

Summer 2015
Waterloo, ON

- reduced web application's local storage space usage by 95%, and overhead by 80%
- won the internal demo day by owning the development of the rewards program
- redesigned and built a new researcher portal interface, while refactoring frontend code

INITIATIVES



SAE AutoDrive Challenge - WATonomous

Fall 2017 - present

Perception Team Member

- researching and prototyping deep models for traffic sign classification
- studying implementations of deep models on Intel FPGAs



Ace Consulting Group

Fall 2014 - Summer 2015

Associate

- prepared and presented research deliverables to portfolio clients
- organized various networking events connecting startups to ventures



Tech Retreat

Winter 2014 - Summer 2016

Founding Organizer

- organized Canada's first annual highschool learnathon and hackathon
- coordinated logistics and sponsorships for 200 students



HIGHLIGHTS

python

ruby

c++

java

jquery

rails

SQL

AWS

scipy

sklearn

pandas

matplotlib



PROJECTS

gestur (Sign Language Classification)

flask, video processing

interaction platform; classify sign language gestures in order to provide automated assistance to people with disabilities

SpartaHack: Best Use of IBM Bluemix,

Best Use of Open Source, 3rd place overall

OpenSpace: Cassini module

OpenSpace, NASA SPICE, lua

space visualization platform; recreated the Cassini mission by parsing NASA SPICE data and integrating it into OpenSpace

The simulation was projected onto the

Hayden Planetarium's dome

watchr (Crisis Management)

node.js, android, socket.io

crowdsourced safety platform; log suspicious sound levels using civilians' phones, in order to trace sound origin and send location personalized evacuation routes

HackPrinceton: Most Impactful app

Exploring Food Embeddings using
SS-Voc Learning

keras, word2vec models

publication; applications of semi-supervised vocabulary-informed (SS-Voc) image classification models to a subset of word2vec and corresponding images, outperforming non-Voc methods' precision by ~10%

TechTanks (AI Game)

rails, redis, paper.js

educational game; built an online arena which allows players to code tank AI and battle samples or other submissions

more on 