Stuart Mashaal

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Education

McGill University Montreal

B.S.Eng - Bachelor of Software Engineering

September 2015 - April 2019

Advanced Coursework: Concurrent Programming, Distributed Systems, Cloud Computing, Applied Machine Learning, Compilers

Experience

Nuance Communications

Montreal, QC, CA

SOFTWARE ENGINEERING INTERN - (JAVA, ACTIVEMQ, SQL, PYTHON/PANDAS/SKLEARN, NODEJS)

May 2018 - August 2018

- Collected job history data from production databases to train classifier for job duration
- Used Random Forest to achieve 97% accuracy on balanced dataset (k-fold cross-validation)
- Improved usability and responsiveness of data-aggregation CLI tool

SourceKnowledge Montreal, QC, CA

SOFTWARE ENGINEERING INTERN - (PHP, SYMPHONY, JQUERY, HANDLEBARS, LODASH)

May 2017 - August 2017

- · Added large features (frontend and backend) to analytics dashboard of real-time ad-bidding system
- · Developed bid-multiplier logic based on Google's website categorization, added to real-time ad-bidding system

IntimateData / DataProphet

Cape Town, South Africa

DATA SCIENCE INTERN(S) - (PYTHON, SKLEARN, R, SQL)

June 2016 - July 2016

- IntimateData: scraped, cleaned and visualized S.A. demographic and language data. Incorporated into existing MySQL DB.
- DataProphet: researched sentiment analysis algos (e.g. LSTM) for Twitter-Bot project. Developed XGBoost-based classifier of EEG waves for 'mind-control wheelchair' prototype

Projects

Northernlights Vision 📮

Personal Project

 $({\sf Javascript}, {\sf AWS}, {\sf Terraform}, {\sf Tensorflow})$

August 2019 - Present

- Set up all AWS configuration, then ported it to Terraform
- Developed data-labelling interface
- Used popular ConvNet to classify night sky as containing Aurora Borealis (or not)

Distributed Transactions Project

Distributed Systems, McGill

(JAVA RMI, CONCURRENCY/PARALLELISM, TWO-PHASE COMMIT)

September 2018 - December 2018

• Designed and implemented a distributed travel reservation system including lock management and consensus protocol

ConuCoursePlanner 🔲

Personal Project

(JAVA TOMCAT, NODEJS, R, REACT, MONGODB)

January 2017 - January 2018

- Developed entire data pipeline: web scraper, data validator, and storage. Also wrote project's core algorithm.
- 100 unique active users per month

Cebolla (Onion Routing Network) 🖫

Telecomms & Networks, McGill

(Python, Cryptography, Multithreading)

September 2017 - December 2017

- Wrote all code for the router nodes and directory node algorithms
- Cryptography was handled with direct use of RSA and AES
- Tested on cluster of 100 servers

Skills

Programming Java, Python, Javascript, OCaml, Bash, Go, R

Cloud & Infra. Basic Networking, Docker/Kubernetes, Terraform, AWS

Other B2 French, Guitar, Public Speaking

SEPTEMBER 13, 2019 STUART MASHAAL · RÉSUMÉ