Jack Wang

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Skills

Languages Python, Scala, Javascript, Java, C++, SQL

Tools React, Nodejs, RabbitMQ, Heroku, Docker, Git

Data Keras, Tensorflow, Scikit Learn, Pandas, Spark, Hadoop, Kafka, Elastic Search, AWS, GCP

Experience

Cardiogram

San Francisco, California

Software Engineer Intern — *May 2017 - August 2017*

- Improved the neural network infrastructure of disease detection models by automating machine allocation, neural network training and performance analysis
- Updated existing neural network architectures to be trainable on multiple GPUs
- Developed a neural network to predict sleep with a 97% area under receiver operating characteristic curve
- Designed and implemented a service to generate and serve sleep predictions to consumers using the mobile app
- Performed query and index optimizations to reduce the database load from mobile app workers

Yelp

San Francisco, California

Software Engineer Intern — *September 2016 - December 2016*

- Improved business location quality by increasing the precision and recall of a bad location detector by 15% and 8%
- Increased machine learning model performance by adding features, tightening training data criteria and developing a gold data set for testing
- Created feedback loop using in app survey questions to validate model predictions
- Optimized survey question ask rates in order to maximize meaningful response rate and reduce question bias towards common attributes

Capital One Canada

Waterloo, Ontario

Data Scientist Intern — *January 2016 - April 2016*

- Developed data driven web applications to help customers manage their spending using D3
- Implement a parallelized data pipeline to ingest terabytes of credit card data using pySpark, Hive and SKlearn
- Created a risk map using D3 to graph changes in the aggregate credit scores of regions over time
- Added Docker support to web server for easy deployment and scaling on AWS

Loyalty One

Toronto, Ontario

Software Developer — *May 2015 - August 2015*

- Developed a data aggregation tool using Spark to eliminate boilerplate code for feature generation and data obfuscation
- Parallelized existing data aggregation processes to reduce run times by 100 times
- Executed large scale performance testing on over 80 terabytes of data to optimize resource allocation when performing data aggregation on AWS
- Prototyped an end to end data streaming pipeline using Spark, Kafka and Elastic Search to do real time analysis on adverstising campaigns
- Deployed projects to local Hadoop Clusters and AWS EC2 clusters of over 300 machines

Education

University of Waterloo

Waterloo, Ontario

Candidate for Bachelor of Software Engineering - 85% cumulative average — *2014 - 2019 (Expected)*