

Jonathan Medhanie

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EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

Bachelor's Degree,
Computer Science &
Mathematics
Vancouver, BC
Sept 2015 - April 2020

SKILLS

Java • C++ • Python •
Machine Learning •
Infrastructure • SQL •
Docker • Go • Distributed
Systems • Hadoop •

COURSEWORK

Algorithm Design (Graduate)
Software Engineering
Computer Vision
Geometric Modelling
Game Theory
Discrete Math (Honors)
Applied Linear Algebra
Multivariable Calculus
Number Theory
Complex Analysis
Optimization in Graphs
Linear Programming

LINKS

Website:

johnnymedhanie.github.io

Github:

github.com/johnnymedhanie

Linkedin:

linkedin.com/in/jonathanmedhanie/

WORK EXPERIENCE

Software Engineer Intern | Twitter, *Real Time Storage*

June 2019 - August 2019

- Redesigned [Manhattan](#)'s exporter, Twitter's distributed database that stores all tweets and user data while serving 10M queries/second across the world
- Optimized Exporter scan by reducing small file outputs from 4.5M to 20K during export by implementing custom MapReduce jobs that splits and merges datasets intelligently
- Tuned Hadoop file system and MapReduce parameters during MapReduce to improve CPU/memory use, decreasing system allocation by a factor of 200+ on Twitter's largest cluster.

Software Engineer Intern | Cisco Systems, *Cloud Infrastructure*

April 2018 - August 2018

- Optimized in-house AWS Virtual Machine healthchecker by reducing number requests made by pattern matching ip addresses/port, reducing time to completion from 30 minutes to 25 seconds
- Implemented a distributed tracing system for our API endpoint, allowing observability into durations of each user's unique request
- Refactored stage/prod databases' schema minimizing query duration

PROJECTS

Depresso | Music Sentiment Analysis with Python/R

June 2018 - September 2018

- Utilizes natural language, text processing and machine learning to plot the variance of emotions in a songs given any musical artist
- Powered by making calls to Spotify and Genius' API detailed lyric and music library, taking an average of both the song's valence and energy in lyrics and tune.
- Plots processed data to dynamic web page deployed on Heroku

Moment | Reactjs Powered Productivity Browser Extension

May 2018 - January 2019

- Extension that periodically notifies user of personal achievements meant to motivate user to continue improving
- Architected, tested and deployed our backend which served authenticated requests
- Integrated with Chrome API to trigger database requests, periodic user view updates and timed notifications

EXPERIENCE

O11ycon - System Observability Conference | Speaker

August 2018 | San Francisco, CA

- Selected to speak and present the flaws of monitoring tools