Matthew D'Souza

2B Software Engineering

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Skills

Languages: Java, Scala, Ruby, C++, C, Python, SQL, JavaScript/jQuery, HTML/CSS
Technologies: Spark, MapReduce, JRuby, Git, Spring, Flask, JavaScriptMVC

Experience

Data Platform Engineering Intern (Shopify) Jan 2017 – Apr 2017

- Maintained and improved ETL systems written in JRuby, Scala (Spark), and Python.
- Reduced overlap between incremental extraction jobs by 95% after using Spark to analyze historical results of late-arriving data
- Built new connectors to extract data from Google Cloud and third-party APIs
- Improved developer efficiency by resolving pain points in the development lifecycle of projects

Software Engineering Intern (Veeva Systems) May 2016 – Aug 2016

- Built a Spring service to queue and asynchronously send usage metrics to Google Analytics
- Identified problems with the product and took ownership of implementing solutions
- Developed enhancements and fixes using Java, SQL, JavaScript, and HTML/CSS

Projects

Employment Statistics (JavaScript, Python) – mattdsouza.com/EmploymentStats Aug 2016

- Iteratively scraped information about co-op employment using regular expressions
- Designed an API using Flask to render HTML templates and query employment information
- Created a user interface allowing the user to filter and explore the data through Highcharts

Metashift (JavaScript, Python) – meta-shift.github.io Aug 2015

- Processed thousands of matches the Riot Games API using a Django back-end
- Dynamically retrieved, aggregated, and displayed large datasets using Highcharts

Sorting Algorithm Visualizer (Java) – github.com/DSouzaM/SortingVisualizer Jan 2015

- Developed a Swing interface to visualize selection, insertion, merge, and quick sort
- Implemented multithreading to compare algorithm efficiency in real time

Education

Candidate for Bachelor of Software Engineering (University of Waterloo) Sep 2015 –

- Shadow Day Ambassador, Open House Volunteer, class representative for the Waterloo Engineering Endowment Fund
- 4.0 GPA

Awards & Achievements

Top 3, Tech Retreat Hackathon (University of Waterloo) Aug 2015

- Created a direct peer-to-peer chat client, circumventing the need for a server using UDP hole-punching