

Ankai Jie

Education

Candidate for Bachelors of Computer Science

University of Waterloo
3.9 GPA
Sept 2015 - Present

International Baccalaureate Graduate

Bayview Secondary School
99% Average, 44/45 IB Points
Sept 2011 - June 2015

Skills Summary

Bash

- ▶ Practical experience with Linux OS
- ▶ Write multi-purpose shell scripts for any Linux based application

Java

- ▶ Solid OOP foundation from working with Java in full scale web and data processing applications
- ▶ Oracle certified Java SE 8 programmer

Javascript

- ▶ Extensive use of web frameworks: Angular.js, Node.js, Backbone.js, D3.js
- ▶ Javascript and JQuery web development experience

Python

- ▶ Implement algorithms for data processing, natural language processing, and machine learning
- ▶ Deep knowledge of the intricacies and kinks of the Python language

SQL

- ▶ Write complex (hundreds of lines) graph processing and data analysis functions on SQL
- ▶ Proficient with database management — Hadoop, MySQL, SQL Server

Contact Me

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L. ca.linkedin.com/in/ankaijie

Relevant Experience

Data Science Engineer / Scotiabank

May 2016 - August 2016

- ▶ Wrote and integrated SQL scripts, Shell scripts, and Apache Giraph computations to convert any static network to a temporal network
- ▶ Automated process of calculating key centrality metrics and identifying important relational and numerical information on Hadoop for temporal networks using layered SQL scripts and Java UDAFs
- ▶ Implemented all pairs and single source shortest paths algorithms with Java on Apache Giraph for network analysis
- ▶ Developed a Hadoop integrated visualizing tool with Spark API and Matplotlib on Python for easy graphing and profiling of temporal networks and US Marine Imports data
- ▶ Expanded nodes and edges tables of Marine Imports network to include data and metrics on notified parties on arrival of shipment
- ▶ Designed and implemented algorithm to save state of a graph in the URL of the web network visualizer
- ▶ Improved functionality and UI of data display and search/filter features of the network visualizer using D3.js and Backbone.js

Web and Java Developer / Dawn InfoTek

May 2016 - August 2016

- ▶ Designed and developed robust database user interface and management tool using AngularJS
- ▶ Integrated and tested web tier to database tier using Java, Spring, and the MVC framework
- ▶ Lead AngularJS learning session for JQuery based team members

Projects

Academic Fraud Detector

- ▶ Program that uses bulk collection/graph processing algorithms on Google Scholar data to identify culprits of citation fraud in academia.
- ▶ Written in python, created as part of UWaterloo research assistantship

HeyKanye!

- ▶ Rap song generator that takes a large database of song lyrics and uses statistical analysis, Markov chains, and parse trees to generate structurally accurate lyrics and sync them to a beat.
- ▶ Written with SQL, Python, Node.js. Winner of Hack the North 2016 and MS Azure API prize.

Personal Website - ankaijie.com

- ▶ Web application that visualizes me as a graph written with D3.js and Backbone.js. Contains my complete portfolio of projects.