# Jack Tan

# Master graduate seeking full-time positions in Software Development and Data Engineering

New York, NY - Email me on Indeed: indeed.com/r/Jack-Tan/73edaf946f91a27e

- MS and BS engineering degrees in Computer Engineering with Data Engineering from Stevens
- 3-Years hard-core Java/C++/Python programming and SQL queries with full dev cycle & web development skills
- Well trained and experienced in various data acquisition, analytics and models

Willing to relocate: Anywhere

Authorized to work in the US for any employer

#### WORK EXPERIENCE

# Software Engineer

Ad-Hoc OLAP Query Processing - Hoboken, NJ - March 2016 to May 2016

- Researched and studied papers on a more succinct SQL syntax (Extended Multi-Feature SQL).
- Built a query processing engine for Ad-Hoc OLAP queries, based EMF SQL syntax, using Java.

#### Skills:

Java, PostgreSQL, SQL, RDBMS, Query Optimization

# **Data Analyst**

Music Recommendation System - Hoboken, NJ - November 2015 to November 2015

- The training data set is users' history preferences, such as scores on songs, albums, artists and genres and metadata about each song. The testing data set is a subset of users in the training set and along with each user there are 6 songs.
- Wrote a script to preprocess the data in Python.
- Developed a program that recommends songs out of given data sets in C++, applying methods such as nearest neighborhood, matrix factorization, stochastic gradient descent, etc.

#### Skills:

R, C++, Machine Learning, Data Analytics

#### Data Analyst

Web Analysis - Hoboken, NJ - October 2015 to November 2015

- Wrote a Python crawler to extract customer review data from Amazon.com and Bestbuy.com.
- Applied various classification methods (Logistic Regression, kNN, Naive Bayes, SVM, etc) to classify restaurant reviews from Yelp.com in Python with scikit-learn.
- Analyzed emotions in posts of diabetes patients utilizing nltk and produced a list of frequent key words for each emotion category.

#### Skills:

Python, NumPy, NLTK, scikit-learn, Mechine Learning, Data Analytics, Selenium WebDriver

# Front-end Web Developer Intern

LiquiZ - Hoboken, NJ - June 2015 to August 2015

- Designed and implemented features for the front-end of LiquiZ, a quiz, testing, and homework platform that looks to solve the problems of user experience, efficiency, and capability of modern platforms in the educational field.
- Wrote a JavaScript HTML rendering library with other team members.
- Designed light-weight JavaScript frameworks (the quiz list section and the student grade list section).
- Deployed Apache Tomcat for web application testing.

#### Skills:

Java, HTML, JavaScript, CSS, AJAX, JSON, Git, Apache Tomcat 7

# **Telecommunication Consulting and Design Intern**

Guangdong Planning and Designing Institute of Telecommunications Co., Ltd - Guangzhou, CN - July 2012 to August 2012

- Used Microsoft Office Visio to draw the layout of the transmission equipment center of metropolitan area network;
- Researched on the design files of metropolitan area network;
- Learned the training documents, such as documents on Machine Rooms' Survey, IP Equipment Introduction, Excel\Visio Application Skills, etc.

#### Skills:

Microsoft Visio, Excel, Powerpoint, Telecommunication, Computer Networks

# **EDUCATION**

# Master of Engineering in Software Engineering and Data Engineering

Stevens Institute of Technology - Hoboken, NJ August 2014 to May 2016

# **Bachelor of Engineering in Information Engineering**

South China University of Technology - Guangzhou, China September 2010 to June 2014

# **SKILLS**

CSS (2 years), DATABASE (Less than 1 year), JAVA (3 years), MATLAB (3 years), HTML (2 years), C++ (3 years), Javascript (2 years), SQL (1 year), Python (2 years), R (2 years), PostgresSQL (1 year), RDBMS (1 year), Relational Algebra (1 year), JSON (1 year), XML (Less than 1 year), Unix (Less than 1 year), Linux (Less than 1 year), Selenium WebDriver (Less than 1 year), scikit-learn (1 year), Numpy (Less than 1 year), NLTK (1 year), Machine Learning (1 year), Data Analysis (1 year), JQuery (Less than 1 year)

#### LINKS

https://github.com/nhtzq

https://sites.google.com/site/liquizyy/

https://www.linkedin.com/in/jack-tan-ab6823116/

# ADDITIONAL INFORMATION

I can balance an egg on my head and pick up 3 peanuts with chopsticks... the same time. My combo skill is harmonic balance of software development and data engineering.