## Fengguo Tian

fgtian4work@gmail.com (716)-986-3166 Santa Clara, CA 95051

LinkedIn: https://www.linkedin.com/in/fengguo-tian-8994425a Web: http://fgtian4work.wixsite.com/fengguotian

## **EDUCATION**

M.S. in Computer Science and Eng. University at Buffalo, State University of New York 2015.5-2016.9

GPA: 3.5/4.0.

M.S. in Electrical Engineering. University at Buffalo, State University of New York 2013.8-2015.5

GPA: 3.7/4.0.

B.Eng. in Electrical Engineering Northwest A&F University — Xi'an, China. 2009.9-2013.7

GPA: 80/100 (3.2/4.0).

**Teaching Assistant** University at Buffalo, State University of New York. 2014,8-2015,5

**Courses List:** Algorithms Analysis & Design, Distributed Systems, Machine Learning, Information Retrieval, Advanced Information Retrieval, Computer Security, Software Engineering and so on.

## **INTERNSHIP and PROJECTS:**

- 1. Xingxinda Equipment Sale Co.Ltd Software Engineer- Big Data (Java); China; 2015
- Implemented the 'Recommendation', 'Chat' functions, 'web statistics' and 'manage' functions.
- Using Hadoop to setup the Distributed Data Center and process high throughput query.
- Built a KNN model using Java and MySQL by combining Web Statistics and Text Mining to find popular products with 500 MB JSON file and Significantly increased the hit rate of recommendation.
- 2. Built HealthCare Data Mining and Recommendation System (Java, AWS, MySQL) 2016
- A data pipeline using **Twitte4J** and Nutch to crawl 2000 websites and 1Million tweets, a **KNN** machine learning predictive model to classify the 1Million tweets.
- A recommendation system as data center to rank and feed the personalized advises and news based on user's profiles and feedbacks. After the training stage, the accuracy is improved to 65%!
- 3. Built a Social Media Data Mining & Retrieval System (Java, AWS, MySQL, Solr, PHP, JS) 2015
- Built a social media data mining website on AWS by implementing the Multilingual Retrieval, Content Tagging, Faceted Search, Cross-document analytics and Semantic search using the clawed 100 MB tweets.
- Applied the Alchemy API, gossipy data model and Apache Solr to study a topic trend and verify the model with dynamic graphics.
- 4. Implemented Neural Networks Handwritten Digits Classification (Python, Machine Learning).
- Implemented a Multilayer Perceptron Neural Network and Logistic Regression to classify hand-written digit images by coding the NN theory and comparing with the result of the **SKLearn**, the accuracy is 99%.
- 5. Implemented a Dynamo-style distributed data storage system in an Android App (Java); 2016
- Implemented three main pieces of Dynamo: Partitioning, Quorum Replication and Failure handling based on consistent hashing to route P2P network to guarantee the CAP.
- Built the multithreaded network following TCP/UDP to support concurrent operations (insert/delete/query) and provide ACID and linearizability using java socket and synchronized method and concurrent data type.

## **TECHNICAL SKILLS**

Java, Python, C/C++, MySQL, Apache HTTP Server/Solr/Tomcat/Hadoop, Eclipse, AWS, HTML, PHP, JavaScript, Open Source, Android Studio, Linux/Unix, MATLAB, Sublime, IPython, XML.