Taiyuan Zhang

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http://firstprayer.github.io

Education

Carnegie Mellon University, Pittsburgh, PA

Master of Computational Data Science, *Analytic* Aug. 2014 – Dec. 2015

Coursework: Machine Learning, Multimedia Database and Data Mining,
Search Engine, Cloud Computing

Tsinghua University, Beijing, China

Bachelor, Computer Software, GPA 89.42(4/51) Sep. 2010 – Jul. 2014

Intelligent System

Non-negative Matrix Factorization based Transfer Learning

Research on applying NMF on Transfer Learning Feb. 2014 – Jun. 2014

- Designed and implemented a program that can automatically download news documents with categories through RSS.
- ➤ Developed a program to automatically extract content, title, time from heterogeneous Chinese news webpage.
- Designed and implemented a new transfer learning algorithm based on NMF which achieves better results in different transfer learning datasets (including a text dataset collected as above describe) than state-of-art common subspace learning methods.

THSS Face Search Engine

Face search engine in Java with MongoDB.

Dec. 2013 – Feb. 2014

- ➤ Implemented face detection, face feature extraction with OpenCV in C++. Integrated the algorithm with search framework through JNI.
- > Developed search framework. Use soft-quantization to boost performance

Web

SigmaLove(Qi-Ming-He-Xin) LLC, Beijing, China

Development

Core developer(member of earliest founder team) Oct. 2013 – May. 2014

- Applied statistical analysis on collected student data, indexed result and implemented different web APIs to support data query
- Refactored previous system to event-driven style with RabbitMQ to improve system robustness
- > Developed complex webapp with AngularJS and jQuery

Hulu, Beijing, China

Software developer intern

Jul.2013 - Oct.2013

- ➤ Built a real-time, online simulation and monitor tool (Simly) for product managers, researchers and content editors
- Processed big data (Hulu users' daily behavior, the rate or predicted preference of users towards shows/movies, models with tens of millions of parameters), indexed in database, and implemented analytical query APIs

Skill

Python, Java, C/C++. Matlab. Data Processing. SQL & NoSQL database