

HEMING ZHANG

Website: heming-zhang.github.io

Email: hemingzhang@wustl.edu

EDUCATION

Washington University in St.Louis, St.Louis, MO
McKelvey School of Engineering
MS, Computer Science, Major GPA: 4.0/4.0

August 2019 - Present

Central China Normal University, Wuhan, China
School of Information Management
BS, Information Management and Information Systems ("Boya" Plan Student)
Overall GPA: 87/100 (Ranked 1/44) Honor: Outstanding Graduate, "Boya" Scholarships in 2016, 2017, 2018

September 2015 - June 2019

PROFESSIONAL EXPERIENCE

Teaching Assistant
Washington University in St. Louis, St. Louis, MO

January 2020 - Present

- Helped students about materials on theory of course 'Introduction to Machine Learning' and build algorithms on logistic regression, bagging&random forests, adaboost etc.

Mitacs Globalink Intern ☞ </>

Summer 2018

Networks, Systems and Security(NSS) Lab, University of British Columbia, Vancouver, BC

- Received the Globalink Research Internship Award of \$4500 offered by MITACS and CSC
- Established a trusted decentralized blockchain to perform machine learning with protection for user privacy
- Wrote python API about deep learning algorithms with packages **numpy**, **sklearn**, **scipy** and **torch** and helped with bootstrapping the deployment of Biscotti on PyTorch

Research Assistant
Chinese Academy of Sciences, Beijing, China

September 2017 - October 2017

- Cleaned GPS track data of 12,138 taxis in Beijing, implemented **ST-matching** algorithm to form road sections
- Used **NMF** method to reduce data dimensions and used **k-Mean** to cluster data with 50 categories
- Insert **Poisson** model into the system to achieve anomaly detection and eventually got accuracy rate of 85%

PROJECTS

Kronos Incident - VAST Challenge </>
Washington University in St. Louis(WUSTL), Instructor: Alvitta Ottley

January 2020 - March 2020

- Wrote front-end with framework **Vue**, **Semantic UI**, and drew dynamic gps map with **d3.js**, interacted with back-end **flask** through **json** and implemented sql basic functions through ORM - **sqlalchemy**

Heapoverflow: An online Q&A community </>
Washington University in St. Louis(WUSTL), Instructor: Todd Sproull

November 2019 - December 2019

- Developed front-end with framework **Vue**, **Semantic UI** and interacted with back-end with **PHP**

Topics Evolution in Quora </>
Central China Normal University(CCNU), Supervisor: Ye Chen

December 2018 - May 2019

- Aimed to analyze the users' interests and their evolution characteristics on the social Q&A community with our improved algorithms from LDA and BTM, so as to guide the personalized recommendation and advertising.
- Used **bs4** and **selenium** to parse and crawl data from Quora website; used **nlTK** and **numpy** to clean collected data, and **btm** to implement topics mining

PUBLICATIONS

Study on Knowledge Dissemination in Online Q&A Community with Social Network Analysis ☞
Zhongyi Wang, **Heming Zhang**, Jing Huang, Chunya Li. 2018, Data Analysis and Knowledge Discovery(CSSCI)

PRACTICAL SKILLS

Programming Languages: (* for proficient) Python*, MATLAB*, C*, JavaScript, Java, Assembly, R
Framework & Packages: PyTorch, Flask, Vue, Semantic UI, d3.js
Environment: Linux, Mac, Windows