HEMING ZHANG

Website: heming-zhang.github.io

Email: hemingzhang@wustl.edu

EDUCATION

Washington University in St.Louis, St.Louis, MO *August 2019 - Present*
McKelvey School of Engineering
MEng, Computer Science and Engineering

Central China Normal University, Wuhan, China *September 2015 - June 2019*
School of Information Management
BA, Information Management and Information Systems
Overall GPA: 87/100 (Ranked 1/44)

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)

PROJECTS

Topics Evolution in Quora ‹/› *December 2018 - May 2019*
Central China Normal Universtiy(CCNU), Supervisor: Ye Chen

- Won "Excellent Capstone Project"
- Aimed to analyze the users' interests and their evolution characteristics of on the social Q&A Community with our improved algorithms from LDA and BTM, so as to guide the personalized recommendation and advertising on Quora Film and Television topics.
- Divided and cleaned the data obtained by crawler according to the period, and then combined the user behaviour data to set weight for the question and answer text within that period.
- Improving BTM algorithm with consideration of text weight, we used new algorithm to conduct topic mining and analyzed the trend of topic evolution, which greatly improved the accuracy of topic mining.

Biscotti: A Ledger for P2P Machine Learning ⚯ ‹/› *Summer 2018*
Networks, Systems and Security(NSS) Lab, UBC, Supervisor: Ivan Beschastnikh

- Received the Globalink Research Internship Award of $4500 offered by MITACS and CSC
- Aimed to establish a trusted decentralized blockchain to perform machine learning in the context of protecting user privacy.
- Through the Verification link and the RONI link in aggregation mechanism to filter of the bad update SGD, which makes test accuracy higher in data sets (MNIST, credit cards) in the case of larger number of users than the previous federated learning and promises a good protection of the users' privacy.

COURSE WORK

Selected Undergraduate Courses

- Game Theory - *Prof. Qingxing Dong*
- Operating System - *Prof. Yi Xiao*
- Optimization Models and Software Tool - *Prof. Qingxing Dong*
- Data Mining - *Prof. Xiang Liu*
- Social Network Analysis - *Prof. Zhongyi Wang*
- Theory and Technique in Search Engine - *Prof. Zhongyi Wang*
- System Engineering - *Prof. Jing Chen*
- Operation Research - *Prof. Qingxing Dong*

Current Master Courses

- CSE 417T Introduction to Machine Learning - *Dr. Henry Chai*
- CSE 361S Introduction to System Software - *Prof. Angelina Lee*
- CSE 503S Rapid Prototype Development and Creative Programming - *Prof. Todd Sproull*

ACADEMIC ACHIEVEMENTS

Awards

- 2018, Shuren Scholarship, Top 20% CCNU - *¥2000*
- 2018, Globalink Research Internship Award, Top 0.5%, Mitacs and CSC - *$4500*
- 2018, Overseas Exchange Scholarship, CCNU - *¥5000*
- 2017, Boya Silver Scholarship, Top 2.5% CCNU - *¥3000*
- 2016, Boya Scholarship, Top 10%, CCNU - *¥2000*

Achievements

- 2019, Outstanding Graduate, Top 20%, CCNU
- 2017, Grand Prize, The 11th Hubei Challenge Cup College Extracurricular Academic Scientific and Technological Works Competition, Top 3%, Hubei provincial department of education
- 2017, Honorable Mention, Mathematical Contest in Modeling and Interdisciplina (MCM/ICM), Top 30%, COMAP
- 2016, Admitted to the "Boya" Plan with excellent academic score and activities, Top 2%, CCNU

EXTRA-CIRRUCULAR

Temporary volunteer   *Summer 2016*
Greater Pittsburgh Community Food Bank, Pittsburgh, PA

- Packed more than 200 boxes of food, totaling 3,120 pounds.

Vice President   *June 2016 - May 2017*
Learning and Innovation Department, Student Union, CCNU, China

PERSONAL TRAITS

Talents

- Violin, Grade Examination Level 8
- Jazz Drum, Grade Examination Level 7
- Calligraphy, First Prize in Middle School Chinese Calligraphy Competition

Hobbies

- Go
- Badminton