

XIN ZHANG

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EDUCATION

Peking University, School of Electronics Engineering and Computer Science Beijing, China
Bachelor of Science in Intelligence Science and Technology | **GPA: 3.51/4.00** *September 2016 - July 2020*
2020 Fall Admission: Carnegie Mellon University(M.S. in Software Engineering), University of Southern California(M.S. in Computer Science), Duke University(M.S. in Electrical and Computer Engineering)

EXPERIENCES

Institute of Network Computing and Information Systems, Peking University Beijing, China
Graduation Thesis, advised by [Bin Cui](#) *September 2019 - June 2020*

- Investigated in the asymmetric influence between different subgroups of users, especially the innovators and the followers, and proposed a framework incorporating such asymmetric influence into user-based collaborative filtering algorithms.
- Improved the effectiveness of recommendation algorithms like User-Based CF and Collaborative Memory Network by applying our framework to them.

Microsoft Research Asia Beijing, China
Software Engineer Intern *March 2020 - June 2020*

- Collaborated with team to develop a development-centric diagnosis algorithm by analyzing fault signals both spatially and temporally; Improved machine-level A/B testing by considering failures' dispersion.
- Developed a web API using Flask, WSGI and SQLite3 and deployed it using Docker to enable prompt impact assessment of software rollouts and root cause analysis of detected anomalies.

Baidu (China) Co., Ltd Beijing, China
Big Data and Data Mining Intern *April 2019 - October 2019*

- Implemented 7 A/B tests using Spark, Hadoop, and Hive to measure the effectiveness of various experiments, including a new conversation strategy and a new UI for Baidu's smart speakers.
- Investigated the similarity of users using cluster algorithms such as K-means and DBSCAN and analyzed over 20 factors influencing similarity using dimensionality reduction methods such as PCA and t-SNE.
- Optimized the control group selection procedure in the A/B test using Spark and Python and increased the credibility of the department's testing framework for a certain kind of experiment.
- Developed a Python script that converts plain-text results into Excel reports to automate the A/B test workflow; the script was used by five colleagues, saving them at least three hours per experiment.

Institute of Computational Linguistics, Peking University Beijing, China
Research Assistant, advised by [Sujian Li](#) *June 2018 - April 2019*

- Wrote a literature review to compare and summarize techniques and corpora in the field of machine reading comprehension (MRC), helping dozens of junior undergraduates get started quickly.
- Proposed quantitatively evaluating the difficulty of questions in MRC datasets such as SQuAD by calculating TF-IDF similarity between questions and the most similar context sentences.

PUBLICATION

Xin Zhang, An Yang, Sujian Li, Yizhong Wang. [Machine Reading Comprehension: a Literature Review.](#)
Preprint on arXiv, 2019.

HONORS AND AWARDS

Excellent Graduate of Beijing *May 2020*
Merit Student of Peking University *September 2017, 2018, 2019*
Huawei Scholarship, Peking University *September 2017, 2018, 2019*
Champion of the Voice of Ganxun Speech Contest, Peking University (1/47) *March 2017*