

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: 3.52/4.00** *September 2016 - July 2020*
Selected Courses: Programming in C&C++, Data Structure and Algorithm, Introduction to Computer Systems, Computer Net and Web Technology, Probability Theory and Statistics, Linear Algebra, Pattern Recognition

EXPERIENCES

Tencent Co., Ltd Beijing, China
Software Engineer Intern *September 2020 - present*

- Currently developing a distributed machine learning framework for training very large (~1 Terabyte) deep learning models, which has comparable throughput as HugeCTR but stronger scalability.
- Built a click-through-rate benchmark to compare the data parallel computing capabilities of TensorFlow, PyTorch, HugeCTR and our framework on Criteo Terabyte Dataset with the DLRM model.

Institute of Network Computing and Information Systems, Peking University Beijing, China
Undergraduate Dissertation, advised by Prof. Bin Cui *September 2019 - June 2020*

- Investigated in the asymmetric influence between different subgroups of users in the scenario of recommendation systems, and proposed a new framework incorporating such asymmetric influence.
- Improved the accuracy and recall of recommendation algorithms including User-Based CF and Collaborative Memory Networks by applying our new framework to them.

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

- Proposed an anomaly detection and analysis algorithm for large-scale servers clusters by inspecting fault signals both spatially and temporally, which reduced the false alarm rate by over 90%.
- Developed a web API for the algorithm mentioned above using Flask, WSGI and SQLite3, and deployed it with Docker to enable prompt and ubiquitous impact assessment of software rollouts on servers.

Baidu (China) Co., Ltd Beijing, China
Software Engineer Intern *April 2019 - October 2019*

- Implemented 12 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 in 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.

Institute of Computational Linguistics, Peking University Beijing, China
Research Assistant, advised by Prof. Sujian Li *June 2018 - March 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.

HONORS AND AWARDS

Excellent Graduate, Beijing Department of Education (top 2% overall in school) *July 2020*
Merit Student, Peking University (top 10% overall in school) *December 2017, 2018, 2019*
Founder/Huawei Scholarship, Peking University (top 10% overall in school) *December 2017, 2018, 2019*