Yinda Zhang

Computer Science, University of Chicago, Chicago, USA
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EDUCATION

University of Chicago   Chicago, USA
- **M.S.** in Computer Science   Sep. 2020 – Present
- **Advisor:** Junchen Jiang

Peking University   Beijing, China
- **B.S.** in Computer Science and Technology   Sep. 2016 – Jun. 2020

PUBLICATIONS

- **Yinda Zhang**, Zaoxing Liu, Ruixin Wang, Tong Yang, Jizhou Li, Ruijie Miao, Peng Liu, Ruwen Zhang, Junchen Jiang. *CocoSketch: High-Performance Sketch-based Measurement over Arbitrary Partial Key Query. SIGCOMM 2021*

- **Yinda Zhang**, Jinyang Li, Yutian Lei, Tong Yang, Zhetao Li, Gong Zhang, Bin Cui. *On-Off Sketch: A Fast and Accurate Sketch on Persistence. VLDB 2021*

- Xiangyang Gou*, Long He*, **Yinda Zhang***, Ke Wang, Xilai Liu, Tong Yang, Yi Wang, Bin Cui. *Sliding Sketches: A Framework using Time Zones for Data Stream Processing in Sliding Windows. KDD 2020*

RESEARCH EXPERIENCE

Pre-Doctoral MS in Computer Science   University of Chicago
Advisor: Junchen Jiang   Jul. 2020 – Present
- *Goal: Apply sketching algorithms to the network measurement system.*
- Adopted the algorithm on subset sum estimation to address arbitrary partial key query; Paper accepted by SIGCOMM 2021
- Applied prior advanced theory to multicore software switches.

Institute of Network Computing and Information Systems   Peking University
Advisor: Tong Yang   May. 2018 – Jun. 2020
- *Goal: Design sketching algorithms for fast and accurate data stream processing*
- Proposed an algorithm for finding heavy distinct hitters; Paper submitted to VLDB 2021.
- Constructed a sketch-based data structure for persistence estimation and finding persistent items; Paper accepted by VLDB 2021.
- Developed an original framework that answers various types of queries in sliding windows; Paper accepted by KDD 2020.

INTERNSHIP EXPERIENCE

Conviva   Beijing, China
Research Intern   Jul. 2020 – Jan. 2021
- Extracted the viewership over time based on the raw logs of events in databases.
- Analyzed the interplay between video content, video quality, and user experience based on the measurements from millions of video sessions and various content providers.