

JINYANG LI

School of Electronics Engineering and Computer Science, Peking University, P.R. China
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EDUCATION

Peking University (PKU)

Bachelor of Science | Computer Science and Technology

Beijing, China

Sep 2016 – Present

- GPA: 3.62/4.00
- Selected awards: Peking University Award for Excellent Research, 2018-2019; Peking University Award for Excellent Learning, 2016-2017

SKILLS

English skill: TOEFL: 111/120, GRE: V160 (86th percentile), Q170 (96th percentile), AW4.5(82nd percentile)

Programming language: C, C++, Java, Python, Go, Verilog, SQL

Computer skill: MapReduce, Hadoop, Hbase, Hive, Pig, ZooKeeper, NoSQL, Spark, GraphX

PUBLICATIONS & MANUSCRIPTS

1. Tong Yang, Haowei Zhang, **Jinyang Li**, Junzhi Gong, Steve Uhlig, Shigang Chen, Xiaoming Li, *HeavyKeeper: An Accurate Algorithm for Finding Top-k Elephant Flows*, **accepted** by *IEEE/ACM Transactions on Networking (ToN)*, 2019
2. Tong Yang, Jie Jiang, Yang Zhou, Long He, **Jinyang Li**, Bin Cui, Steve Uhlig, Xiaoming Li, *Fast and Accurate Stream Processing by Filtering the Cold*, **accepted** by *The International Journal on Very Large Data Bases (VLDB Journal)*, 2019
3. **Jinyang Li**, Jizhou Li, Tong Yang, Zhaodong Kang, Aoran Li, Dagang Li, Steve Uhlig, Ori Rottenstreich, *Elastic Cuckoo Filter: Virtualizing, Shrinking, and Extending Cuckoo Filters*, **submitted** to *IEEE Transactions on Parallel & Distributed Systems (TPDS)*, 2019

RESEARCH EXPERIENCE

FORWARD Data Lab, University of Illinois at Urbana-Champaign

Illinois, US

Research Assistant to Professor Kevin Chen-Chuan Chang

July 2019 – Present

- Worked on ordered access problem in order to combine databases and spreadsheets
- Designed an indexing structure to maintain the mapping from positions of rows in a spreadsheet to primary keys of rows in a database while supporting typical user operations; paper in preparation

Network Big Data Lab, Peking University

Beijing, China

Research Assistant to Professor Tong Yang

Sep 2017 – Aug 2019

- Worked on algorithms about networking measurement, stream processing and data analysis
- Proposed a data structure to achieve fast and accurate stream processing by filtering cold items; paper accepted by *IEEE/ACM ToN*
- Proposed a data structure to accurately find top-k elephant flows; paper accepted by *VLDB Journal*
- Proposed a variant of Cuckoo filter to achieve elasticity by techniques of virtualization, shrinkage and extension; paper submitted to *TPDS*

EXTRACURRICULAR ACTIVITIES

- Enjoy playing the piano: A proficient pianist with over 10 years of experience
- Enjoy being a volunteer: A volunteer in International Festival of Peking University, a volunteer in activities of the 120th anniversary of Peking University, a volunteer teacher in a primary school