Zhezheng (Xander) Song

Ph.D. student, Carnegie Mellon University, Pittsburgh, USA
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EDUCATION

Carnegie Mellon University, Pittsburgh, USA — Aug. 2025 — present
Ph.D. in the Joint Carnegie Mellon–University of Pittsburgh Program in Computational Biology

The Pennsylvania State University, State College, USA — Aug. 2022 — Aug. 2025
Master of Science in Computer Science and Engineering — Cumulative GPA: 3.93/4.00

Xi'an Jiaotong University, Xi'an, China — Aug. 2017 — Sep. 2021
Bachelor of Science in Computer Science

University of California, Berkeley, Berkeley, USA — Jan. 2019 — May. 2020
Exchange Student

PUBLICATIONS

Antonio Blanca and **Zhezheng Song**. Cutoff for the Swendsen–Wang dynamics on the complete graph. arXiv.
Zhezheng Song, Tasfia Zahin, Xiang Li, Mingfu Shao. Accurate Detection of Tandem Repeats from Error-Prone Sequences with EquiRep. Accepted to Genome Research in 2025. (An extended abstract appeared in RECOMB 2025 proceedings.) bioRxiv.

Abdullah Al Ishtiaq, Sarkar Snigdha Sarathi Das, Syed Md Mukit Rashid, Ali Ranjbar, Kai Tu, Tianwei Wu, **Zhezheng Song**, Weixuan Wang, Mujtahid Akon, Rui Zhang, Syed Rafiul Hussain. Hermes: Unlocking security analysis of cellular network protocols by synthesizing finite state machines from natural language specifications. USENIX Security Symposium (USENIX Security), 2024.

Chenguang Zheng, Hongzhi Chen, Yuxuan Cheng, **Zhezheng Song**, Yifan Wu, Changji Li, James Cheng, Hao Yang, Shuai Zhang. ByteGNN: efficient graph neural network training at large scale. VLDB, 2022.

WORK EXPERIENCE

Shenzhen Tencent Computer System Co. LTD — Shenzhen, China
Game client development intern — Jul. 2020 — Aug. 2020

- Participated in the development of a large-scale RPG game using Unreal Engine 4 and C++.
- Enhanced the game editor's UI, added new functionalities, and optimized building generation algorithms.
- Designed skeletal motion animations with inverse kinematics for game characters.

TEACHING EXPERIENCE

The Pennsylvania State University — State College, USA
Teaching Assistant

- CMPSC 465: Data Structures and Algorithms — Fall 2024
  Awarded Outstanding Teaching Assistant of the Year.
- CMPSC 465: Data Structures and Algorithms — Spring 2023

OTHER EXPERIENCES

ICPC (Competitive Programming)

- **Undergraduate contestant** Represented Xi'an Jiaotong University for two years, earning a gold prize in the 2020 International Collegiate Programming Contest (ICPC) Asia Regional Contest.
- **Graduate contestant** Won first place in the 2023 Penn State Programming Contest.
- **Coach** Served as a coach for the Pennsylvania State University ICPC team from 2023 to 2025. The team qualified for the North America Championship (NAC) for the first time in the university's history during the ICPC East Central North America Regional Programming Contest (ECNA) 2023. and qualified again in 2024.