

HAOWEN ZHANG

Georgia Institute of Technology ◊ Atlanta, GA 30332, United States
(+1) 404 200 3022 ◊ hwzhang@gatech.edu

EDUCATION

Georgia Institute of Technology 2017 - Present
Ph.D. student in Computational Science and Engineering

Shandong University 2013 - 2017
B.E., Hons, in Computer Science and Technology

RESEARCH EXPERIENCE

Georgia Institute of Technology Aug. 2017 - Present
Graduate Research Assistant; Advisor: Dr. Srinivas Aluru

Tsinghua University & National Institutes for Food and Drug Control Jan. 2017 - July 2017
Visiting Student; Advisor: Dr. Tao Jiang and Dr. Tai Guo

Shandong University Aug. 2015 - Jan. 2017
Research Assistant; Advisor: Dr. Weiguo Liu

The University of Hong Kong Aug. 2016
Research Intern; Advisor: Dr. Siu-Ming Yiu

PUBLICATIONS

1. Chirag Jain, **Haowen Zhang**, Alexander Dilthey, and Srinivas Aluru. Mapping paired-end reads to sequence graphs. In *Workshop on Algorithms in Bioinformatics (WABI), 2019*, 2019. (accepted)
2. Chirag Jain[†], **Haowen Zhang**[†], Yu Gao, and Srinivas Aluru. On the complexity of sequence to graph alignment. In Lenore J. Cowen, editor, *Research in Computational Molecular Biology (RECOMB)*, pages 85–100, Cham, 2019. Springer International Publishing. ([†]joint first-authors)
3. Chirag Jain, Sanchit Misra, **Haowen Zhang**, Alexander Dilthey, and Srinivas Aluru. Accelerating sequence alignment to graphs. In *Parallel and Distributed Processing Symposium (IPDPS), 2019 IEEE International*. IEEE, 2019
4. Yueyue Liu, Tai Guo, Qingchuan Yu, **Haowen Zhang**, Jialiang Du, Yunqi Zhang, Shengli Xia, Huan Yang, and Qihan Li. Association of human leukocyte antigen alleles and supertypes with immunogenicity of oral rotavirus vaccine given to infants in china. *Medicine*, 97(40):e12706, 2018
5. **Haowen Zhang**[†], Yuandong Chan[†], Kaichao Fan, Bertil Schmidt, and Weiguo Liu. Fast and efficient short read mapping based on a succinct hash index. *BMC bioinformatics*, 19(1):92, 2018. ([†]contributed equally)

PREPRINTS

1. **Haowen Zhang**, Chirag Jain, and Srinivas Aluru. A comprehensive evaluation of long read error correction methods. *bioRxiv*, 2019. (submitted)

POSTERS

1. Chirag Jain, Sanchit Misra, **Haowen Zhang**, Alexander Dilthey, and Srinivas Aluru. Accelerating sequence alignment to graphs. RECOMB, May 2019.

SELECTED HONORS AND AWARDS

- RECOMB Best Poster Award 2019
- Workshop on String Algorithms in Bioinformatics (StringBio) Travel Award 2018
- Workshop on the Future of Algorithms in Biology (FAB) Travel Fellowship 2018

TEACHING

- Graduate Teaching Assistant for Introduction to High Performance Computing, Georgia Tech, 2019 spring

TALKS

- On the complexity of sequence to graph alignment, RECOMB, May 2019
- On the complexity of sequence to graph alignment, HotCSE, Georgia Tech, March 2019

SERVICE

- External reviewer: SC 2019, IPDPS 2018
- Journal reviewer: Nucleic Acids Research

SKILLS

- Programming: C/C++, Java, Shell, Python, \LaTeX
- Parallel computing: OpenMP, MPI, code vectorization