# **HAOWEN ZHANG**

Georgia Institute of Technology  $\diamond$  Atlanta, GA 30332, United States (+1) 404 200 3022  $\diamond$  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

Visiting Student; Advisor: Dr. Tao Jiang and Dr. Tai Guo

Shandong University

Aug. 2015 - Jan. 2017

Jan. 2017 - July 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<sup>†</sup>, **Haowen Zhang**<sup>†</sup>, Yu Gao, and Srinivas Aluru. On the complexity of sequence to graph alignment. In *International Conference on Research in Computational Molecular Biology (RECOMB)*. Springer, 2019. (†contributed equally)
- 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. (accepted)
- 3. 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
- 4. **Haowen Zhang**<sup>†</sup>, Yuandong Chan<sup>†</sup>, 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

• 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: IPDPS 2018

• Journal reviewer: Nucleic Acids Research

# **SKILLS**

• Programming: C/C++, Java, Shell, Python, LATEX

• Parallel computing: OpenMP, MPI, code vectorization