

# WENJING MA

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Ph.D. student, Computer Science and Informatics (BMI track), Emory University  
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## Education

### **Ph.D. student in Computer Science (Biomedical Informatics Track)**

*expected 2024*

Department of Computer Science, Emory University, Atlanta, GA, U.S.

GPA: 4.0/4.0

Advisor: Dr. Zhaohui “Steve” Qin

### **Visiting Scholar in Bioinformatics**

*08/2018 -- 06/2019*

Center for Public Health Genomics, University of Virginia, Charlottesville, VA, U.S.

Advisor: Dr. Chongzhi Zang

### **M.S. and B.S. in Computer Science and Technology**

*09/2010 -- 06/2017*

Beijing University of Posts and Telecommunications (BUPT), Beijing, China

Rank: 20/297

### **Exchange student at the Institute of Technology**

*Fall 2015*

Linköping University, Sweden

## Research Experience

### **SNP prediction from gene expression profile**

*01/2020 -- Present*

- Predict possible SNPs correlated to gene expression variations using deep learning models.

### **Cell-type specific transcriptional activity identification**

*08/2019 -- Present*

- Identify Cell-type marker genes by applying non-parametric tests to an unbiased mouse brain single-cell RNA-seq dataset.
- Detect key cell type involved in other bulk RNA-seq experiments without using deconvolution methods.

### **Transcription factor association analysis**

*08/2018 -- 06/2019*

- Develop a web server for the identification of TFs that regulate a given gene set or genomic binding profile by leveraging publicly available TF ChIP-seq datasets, H3K27ac ChIP-seq profiles and DNase I Hypersensitive Sites.
- Optimize data structure and algorithm to improve performance and shorten workflow execution time.

## Publications and Posters

**Wenjing Ma**, Zhenjia Wang, Yifan Zhang, Neal E Magee, Yang Chen and Chongzhi Zang.

*Feb 2020*

BARTweb: a web server for transcription factor association analysis. [bioRxiv](#) [[website](#)] [[poster](#)]

## Honors

Women in Natural Sciences Fellowship

*Emory University, U.S., 2019*

Innovative Mention, Google Girls’ Hackathon 2016 (5/40)

*Google, China, 2016*

Honorable Mention, Interdisciplinary Contest in Modeling (ICM)

*COMAP, U.S., 2013*

Outstanding Mention on Music Robot (8/60)

*The National College Student’s Science and Technology*

*Innovation Project, China, 2012*

First-, Second-Class Scholarships

*BUPT, China, 2010-2017*