SONGPENG ZU

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EDUCATION

Tsinghua University

2011.09 - Present

PhD Candidate, Bioinformatics Laboratory, Department of Automation, Tsinghua University Graduate Major GPA: 90.84/100

- Applied Stochastic Process
- Real Analysis, Basic Functional Analysis
- Pattern Recognition, Probabilistic Graph
- Applied Abstract Algebra
- Design of Bioinformatics Algorithms
- Probability and Statistics in High Dimensions

Tsinghua University

2007.09 - 2011.07

Bachelor, School of Life Science, Tsinghua University

Undergraduate Major GPA: 86.32/100

RESEARCH EXPERIENCE

Department of Automation, Tsinghua University

2011.07 - Present

Major on predicting compound-protein interactions from the machine learning perspective.

- Predicting chemogenomic features from drug-target interactions by EM algorithm.
- Predicting drug-target interactions by a graph partition model.
- Quantitatively predicting on compound-protein interactions based on transfer learning.

Department of Statistics, Harvard University

2014.03 - 2014.09

cis-eQTLs detection on GTEx Project.

• Using the Bayesian Nonparametric tests via sliced inversed modeling to detect the non-linear relationships.

Internship in Baidu Inc, Beijing, China

2014.01 - 2014.02

- Relating the influenza epidemics with the query data in China.
- Studying the AIDS risks in different regions with the query data in China.

Internship in Disease Control and Prevention Center, Liuzhou, China 2013.07 - 2013.08

- Studying the AIDS subtypes in Liuzhou by the DNA sequence data.
- Helping them to construct the methods on sequence analysis of AIDS.

PUBLICATION

Zu S., Chen T, Li S. Global optimization-based inference of chemogenomic features from drug-target interactions. Bioinformatics, 2015. (published online)

WORK EXPERIENCE

• TA of Introduction to Systems Biology for undergraduate students	2014.09 - 2015.01
• TA of Probabilistic Graphical Models for graduate students	2013.09 - 2014.01
• Undergraduate Affair Counselor (for scholarship and financial aid assessment)	2011.08 - 2013.01
• The volunteer of 2008 Beijing Olympic Games	2008.08

AWARDS

• Tsinghua Scholarship for Overseas Graduate Studies	2014
• Tsinghua Excellent Undergraduate Affair Counselor	2013
• Tsinghua Zhongying Tang Scholarship	2008, 2009, 2010

TECHNIQUES AND INTERESTS

Computer Languages	R, Python, Perl, C/C++, Shell
Tools	Emacs, Vim, Latex

Interests The international ballroom dance, Football