# JIAN GAO

CONTRACT **INFORMATION**  Web Sciences Center

Univ. of Elec. Sci. & Tech. of China No.2006, Xivuan Ave. West Hi-Tech Zone

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RESEARCH **INTERESTS**  Network Science: Networked Spreading Phenomenon, Coauthorship Networks Recommender Systems: Recommendation Algorithms, Ranking Problems

Data Analysis: Workload and Performance Analysis, Resignation Predication

**EDUCATION** 

Univ. of Elec. Sci. & Tech. of China (UESTC)

Sept. 2014 - Now Chengdu, China

Ph.D Student in Computer Science

Web Sciences Center, School of Computer Science & Engineering

Adviser: Prof. Tao Zhou

Univ. of Elec. Sci. & Tech. of China (UESTC)

Master Student in Computer Science

Sept. 2012 - Jul. 2014 Chengdu, China

Web Sciences Center, School of Computer Science & Engineering

Adviser: Prof. Tao Zhou

Univ. of Elec. Sci. & Tech. of China (UESTC)

Bachelor of Science in Mathematics, Highest honors

School of Mathematical Sciences

Chengdu, China

Sept. 2008 - Jul. 2012

Shangzhi (No.1) High School

Sept. 2005 - Jul. 2008 High School Diploma

Harbin, China

RESEARCH EXPERIENCE Research Assistant

Web Sciences Center, UESTC

Advised by Prof. Tao Zhou and Yanqing Hu

Did research on online social networks and percolation on spatial networks, accomplished two journal papers, will write one more journal paper.

Research Assistant

Nov. 2011 - Aug. 2013

Sept. 2013 - Sept. 2014

Web Sciences Center, UESTC

Advised by Prof. Mingsheng Shang and Shimin Cai

Did research on missing value imputation, evolution and ranking problem of online rating systems, accomplished two journal papers, will write one conference paper.

Research Assistant

Sept. 2010 - Oct. 2011

School of Mathematical Sciences, UESTC

Advised by Assoc. Prof. Mingqi Li

Did research on modeling the evolution of microbial population in a wine cellar and evaluating scholarship in universities, published two journal papers in Chinese.

REFEREED **PUBLICATIONS**  **Book Chapter** 

Jian Gao, Linyan Zhang, Qian-Ming Zhang and Tao Zhou. Social Physics: Social

Governance (No. 5 in Social Physics Series). Big Data Human Resources: Performance Analysis and Promotion/Resignation in Employee Networks, Beijing: Science Press, 2014. (in Chinese)

# Journal Papers

- [1] <u>Jian Gao</u>, Yu-Wei Dong, Ming-Shing Shang, Shi-Min Cai, and Tao Zhou. *A group-based ranking method for online rating systems with spamming attacks*. 2014. (In Preparation)
- [2] <u>Jian Gao</u>, Tao Zhou, and Yanqing Hu. Bootstrap percolation on spatial networks. arXiv:1408.1290, 2014. (Submitted)
- [3] Jian Yuan, Qian-Ming Zhang, <u>Jian Gao</u>, Linyan Zhang, Xue-Song Wan, Xiao-Jun Yu, and Tao Zhou. *Promotion and resignation in employee networks*. 2014. (Submitted)
- [4] Dan-Dan Zhao, An Zeng, Ming-Sheng Shang, and <u>Jian Gao</u>. Long-term effects of recommendation on the evolution of online systems. Chinese Physics Letters, 2013, 30(11): 8901.
- [5] Fang-Jian Guo, Jiang Su, and <u>Jian Gao</u>. Finding conspirators in the network via machine learning. The UMAP Journal, 33(3), 2012. (Outstanding Winner paper for MCM/ICM 2012)
- [6] <u>Jian Gao</u>, Ding-Rong Di, and Ze-Fang Yang. Study of the evolution of microbial population in a wine cellar by modeling. Experiment Science and Technology. 2012, 10(3), 249-253. (in Chinese)
- [7] <u>Jian Gao</u>, and Xi-Nan Zhang. Comprehensive scholarship evaluation model in colleges and universities. J Chongqing Technol Business Univ. (Nat Sei Ed). 2012, 29(1), 36-41. (in Chinese)
- [8] <u>Jian Gao</u>, Jie Cheng, and Wei Xie. *Volume calculation of a shifted oil tank*. Tianfu Mathematic. 2011, 17, 24-32. (in Chinese)

# TEACHING EXPERIENCE

#### Teaching Assistant

Sept. 2012 - Jan. 2013

School of Mathematical Sciences, UESTC

Course: Mathematical Modeling Instructor: Lectr. Hongfei Du

Developed and gave lectures in a senior undergraduate level course. Instructed students in the Mathematical Contest in Modeling (MCM).

## Teaching Assistant

Sept. 2013 - Jan. 2014

School of Mathematical Sciences, UESTC

Course: Calculus (II)

Instructor: Assoc. Prof. Yong Zhang

Developed and gave lectures in a freshman level course. Instructed students in research

training.

# WORKING EXPERIENCE

# Research Intern

Jan. 2014 - Dec. 2014

Hire Big Data (Chengdu) LTD., Chengdu, China

Position: Senior Algorithms Engineer

Did workload and performance analysis, promotion and resignation predication, and searching algorithm design.

## Management Intern

Sept. 2010 - Jun. 2012

Department of Student Affair, School of Mathematical Sciences, UESTC

Position: Assistant Counselor

| SCHOLARSHIP |   | 14-2015         |
|-------------|---|-----------------|
|             |   | 14-2015         |
|             | Tang Lixin Scholarship $(0.2\%)$ , UESTC 20   | 13-2014         |
|             |   | 13-2014         |
|             |   | 012-2013        |
|             | - V   | 11-2012         |
|             |   | 010-2011        |
|             |   | 010-2011        |
|             |   | 009-2010        |
|             | National Inspiration Scholarship (5%), Ministry of Education of China 20  | 09-2010         |
| AWARDS      | Best Poster Award in the 2nd Conference on Complexity Science (5%) Chinese Complexity Science Research Council  | 2014            |
|             | Outstanding Winner Award in 2012 Mathematical/Interdisciplinary Contest in Modeling (0.3%)  2012  COMAP, sponsored by SIAM, MAA, NSA and INFORMS  |                 |
|             | Second-class Award in Asia-Pacific Mathematical Contest in Modeling (4.5%)  | (a) 2011        |
|             | MATHOR Network, sponsored by APMMW  | 0) 2011         |
|             | Second-class Award in SuBei Mathematical League in Modeling (10%) IIAM of Jiangsu Province, sponsored by CUM and IIAM of Xuzhou City  | 2011            |
|             | Third-class Award in Online Mathematical Modeling (20%)  Mathematical Society of Inner Mongolia and madio.net   | 2011            |
|             | National Second-class Award in Contemporary Undergraduate Mathematical in Modeling (5%)  CSIAM, sponsored by COMAP, MathWorks Inc and IBM Inc   | Contest<br>2010 |
|             | First-class Award in Mathematical Contest in Modeling (1.8%) UESTC, sponsored by School of Continuing Education   | 2010            |
| HONOURS     | Deserving Candidate and Outstanding Team of CAS Summer School on Science, China Academic of Science (CAS) & Beijing Normal University  Outstanding Student of the University (0.2%, highest honor), UESTC | 2013<br>2012    |
|             | Outstanding Graduates Awards of the University (5%), UESTC  | 2012            |
|             | A-level Certificate of Students' Comprehensive Ability, Sichuan Youth Leagu   |                 |
|             | Outstanding Individual on Work-study, the only in our school (1%), UESTC  |                 |
|             | Excellent Individual in Social Practice of the University (5%), UESTC   | 2011            |
|             | Excellent League Cadres of the University (5%), UESTC   | 2010            |
|             | Ten Person of the Year - Self-star (2%), School of Math, UESTC  | 2009            |
|             | Excellent Class Cadres (5%), School of Math, UESTC  | 2009            |
|             | Spiritual Civilization Award (5%), School of Math, UESTC  | 2009            |

**TALKS** 

**CONTRIBUTED** Bootstrap percolation on spatial networks.

Oct. 2014

The 10th Chinese Conference on Complex Networks, National University of Defense Technology, Changsha, China

Bootstrap percolation on Kleinberg's network.

Jul. 2014

The 2nd Conference on Complexity Science (Academic Conference), Wenzhou University, Wenzhou, China

Collective behavior and intervention of crowd.

Oct. 2013

The CAS Summer School for National Graduates - School of Systems Science. Academy of Mathematics and Systems Science, CAS, Beijing, China

A two-stage-ranking algorithm based on interval clustering.

Jan. 2013

Winter School on Networks and Complexity, UESTC, Chengdu, China

# **EXTRA ACADEMIC** ACTIVITY

Member of Innovation Study and Share (ISS) Club Nov. 2013 - Now The club is under Tang Lixin Education Development Foundation in UESTC. Chengdu, China

Instructor of Association Mathematical Modeling (AMM) Oct. 2011 - Jun. 2014 The AMM is a student association in UESTC. I served as a Distinguished Instructor and gave lecture to members for over two years. The association won "Top Ten Associations in UESTC" for two years and won "Attractive Associations in Sichuan Province" in 2012. Chengdu, China

Vice Station of Mathematical Modeling Forum Mar. 2011 - Dec. 2012 The forum is built by School of Mathematical Sciences in UESTC, aiming to serve all mathematical modeling enthusiasts. I served as the Vice Station and engaged in the daily management. Chengdu, China

Leader of Work-Study Team in the School Sept. 2010 - Jun. 2012 The program is built by Student Financial Aid Center (SFAC) in UESTC. I led the team win "Outstanding Units in Work-Study Program of UESTC" for two years. Chenqdu, China

Vice Minister and Journalist of Propaganda Department Sept. 2008 - Jun. 2009 Student Union, School of Mathematical Sciences, UESTC. Chengdu, China

Monitor of the Class, No. 28102010 Sept. 2008 - Jan. 2011 School of Mathematical Sciences, UESTC. I led the class win "Outstanding Class in UESTC" for three years. Chengdu, China

## **SKILLS**

Programming: MATLAB (practical experiences), Python, C/C++ (basic knowledge)

Typesetting: LATEX, MS Office

Language: Chinese (native), English (Intermediate)

#### **HOBBY**

Soccer, Badminton, Skiing, Skating