

Wei Wei

Education

2009.9

Undergraduate, Shanghai Jiao Tong University, Shanghai.

- **Major:** Computer Science and Engineering.
- **GPA & Ranking:** Overall GPA: 89.9/100, Major GPA: 89.68/100, Ranking: 5/123.
- **Major Courses:** Algorithm and Complexity (100), Computer Networking (92), Mining of Massive Dataset (95), Operating System (99), Computability Theory (93), Compiler Principles (92), Software Engineering (91), Discrete Mathematics (97), Linear Algebra (96), Probability and Statistics (97), and so on.

2009.6

High school graduate, Yuxin School Attached to Capital Normal University, Beijing.

Academic Experience

2011.9

Research Assistant, Data Center Research Group, Advanced Network Lab (ANL).

- Advisor: Xiaofeng Gao (gao-xf@cs.sjtu.edu.cn) and Guihai Chen (gchen@cs.sjtu.edu.cn).
- Research interest: cloud computing, data center networks, big data.

2012.9-

Project Member, *Multicast in Hybrid Data Center Network*, Data Center Research Group.

- Presented NEMO, a novel efficient multicast routing scheme for hybrid data center networks.
- Theoretical analysis about the performance of NEMO.
- Extensive simulations show that NEMO outperforms previous schemes.
 - Research achievements: a conference paper [?] submitted.

2012.7-9

Project Leader, *Quality Assured VM Placement*, Data Center Research Group.

- Proposed a novel dynamic VM placement method and take correlation among VMs into consideration.
- Utilize modern portfolio theory to assure resources are allocated without SLA violations.
 - Research achievements: a conference paper [2] submitted.

2012.6-10

Project Member, *SHERIFF:Pre-Alert Management System*, Data Center Research Group.

- Designed a novel distributed manager which is in charge of VM migration and flow control.
- Utilize forecasted demands given by ARIMA and Artificial Neural Network to improve the performance.
- Responsible for the pre-alert part and also take part in the simulation part.
 - Research achievements: a conference paper [?] submitted.

2012.4-6

Project Member, *Wireless Data Center Network (WDCN)*, Data Center Research Group.

- Summarized the history of the development of WDCN and looked into the future of WDCN.
- Worked out a survey about optimization problems and design issues in WDCN.
 - Research achievements: a journal article [1] accepted.

Publications

- [1] Wei Wei, Xuanzhong Wei, Xiaofeng Gao, and Guihai Chen. "Wireless Technology for Data-center Networks," *ZTE Communications*, vol. 18, pp. 1-6, August 2012. (Download URL: <http://db.tt/c2N02khM>)
- [2] Wei Wei, Xuanzhong Wei, Tao Chen, Xiaofeng Gao, and Guihai Chen. "Dynamic Correlative VM Placement for Quality-Assured Cloud Service," submitted to *the IEEE International Conference On Communications (IEEE ICC 2013)*. (under review) (Download Unavailable)
- [3] Xiaofeng Gao, Wei Wei, Xuanzhong Wei, Tao Chen, Fan Wu, and Guihai Chen. "NEMO: A Novel Efficient Multicast Routing Scheme for Hybrid Data Center Networks", submitted to *IEEE Wireless Communications and Networking Conference (IEEE WCNC 2013)*. (under review) (Download Unavailable)
- [4] Xiaofeng Gao, Xuanzhong Wei, Wei Wei, Tao Chen, and Guihai Chen. "Sheriff: A Regional Pre-Alert Management Scheme in Hybrid Data Center Networks", submitted to *International Conference on Distributed Computing Systems (ICDCS 2013)*. (under review) (Download Unavailable)

Awards and Honors

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| 2012.10 | National Scholarship , <i>Top 1% nationwide.</i> |
| 2012.10 | Academic Excellence Scholarship (1st class) of SJTU , <i>Top 2% .</i> |
| 2011.11 | Merit student of Shanghai Jiao Tong University , <i>3% of all the students in SJTU.</i> |
| 2011.9 | Modeling , <i>Third Prize of China Undergraduate Mathematical Contest in Modeling.</i> |
| 2010.10 | Jidian Electronics Scholarship , <i>Top 30 of approximately 560 in SEIEE.</i> |
| 2009.6 | Merit student of Beijing , <i>About 2% of all the students in Beijing.</i> |
| 2010.10-2011.10 | Academic Excellence Scholarship (2nd class) of SJTU , <i>Top 10%, 2 times.</i> |

Standardized Test

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| TOEFL | Reading: 29, Listening: 30, Speaking: 23, Writing: 29. Total: 111. |
| GRE | Verbal Reasoning: 154, Quantitative Reasoning: 170, Analytical Writing: 4. |

Course Projects

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| 2012.4 | Project Member , <i>Science and Technology Innovation Patrt 4-J</i> , ○ Learn about the principals of neural network and implement on our own using <u>C/C++</u> and <u>Matlab</u> . ○ Train a SVM classifier to help us automatically classify Japanese patents using <u>LibSVM</u> . Score: 95. |
| 2011.11 | Project Leader , <i>Course Project of Operating System</i> , ○ Learn about file system and design a distributed file system using <u>advanced Linux programming</u> . ○ Master <u>socket programming</u> to set up connections between clients and server to transfer commands. Score: 97. |
| 2011.11 | Project Member , <i>Science and Technology Innovation Part 2-B</i> , ○ Program a toy car that can automatically run along the track using <u>C/C++</u> . ○ Use a camera to capture surroundings and then generate the route of the car using <u>OpenCV</u> . Score: 96. |

Computer Skills

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| Programming | C/C++, Matlab, Python, Ruby, Perl, Java, JavaScript, PHP, MySQL, Awk, Octave, Bash. |
| Document | L ^A T _E X, Word, Excel, Vim, TeXworks, Gnuplot, Visio. |

Activities

Professional Activities

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| 2012.6-9 | External Reviewer. ○ IEEE Transactions on Parallel and Distributed Systems (TPDS) 2012.6 ○ IEEE International Conference on Computer Communications (INFOCOM) 2012.9 ○ International Symposium on High-Performance Computer Architecture (HPCA) 2012.9 |
| 2012.6- | Student Member. ○ Association for Computing Machinery (ACM) Student Member ○ China Computer Association (CCF) Student Member |

Social Activities

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| 2011.6-2012.5 | President , <i>of Shanghai Jiao Tong University Soccer Association.</i> ○ Have more than 50 members with a yearly budget of 10,000 RMB. ○ Receive patronage from a local company and use the money to promote Xiwang Cup. |
| 2010.10 | Volunteer , <i>The World Expo 2010 Shanghai.</i> ○ Traffic and service information consulting |
| 2010.9- | Left back , <i>Soccer Team of School of Electronic Information and Electrical Engineering.</i> ○ Won the second place in the 22 nd Xiwang Cup in May, 2011. ○ Won the first place in the 23 rd Xiwang Cup in May, 2012. |