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## CURRICULUM VITAE

2016/05/02

- REPRODUCIBLE RESEARCH INTERESTS**     **Network science**  
Social network, percolation theory, branching processes, diffusion dynamic, game theory, social computing, ecosystem network and dynamical model, human behaviors
- EDUCATION**
- Ph.D., Computer Science**     **2004 - 2010**  
[Zhejiang University](#), Hangzhou, China
- Thesis research on modeling and analysis of multi-scale complex biological networks
  - Dissertation Advisor: Jiangang Yang, Ph.D. and Xiaogang Jin, Ph.D
  - First-grade scholarship for postgraduate, Zhejiang University, 2004-2005
  - Excellent All-round Postgraduate, Zhejiang University, 2004-2005
  - First-grade scholarship for postgraduate, Zhejiang University, 2005-2006
  - Excellent All-round Postgraduate, Zhejiang University, 2005-2006
- [Santa Fe Institute \(SFI\)](#), Santa Fe, USA     **June 2008**
- Participant of the 2008 [Complex Systems Summer School \(CSSS\)](#)
- B.S., Materials Science and Engineering**     **1999 - 2003**  
[Zhejiang University](#), Hangzhou, China
- Thesis on Computational thermodynamics
  - Advisor: Yi Pan, Ph.D.
- RESEARCH CAREER**
- Associate professor, Ecosystem management**     **2013 - Now**  
[College of Computer Science and Technology, Zhejiang University of Technology](#), Hangzhou  
China
- Direct on studying “Diffusion dynamics on multiplex social networks”
  - Direct on studying “The effect of bounded rationality on ecosystem management”
- Postdoctoral research assistant, Ecology network analysis**     **2011 - 2012**  
[College of Life Sciences, Zhejiang University](#), Hangzhou China
- Direct on studying “Epidemic dynamics on complex networks”
  - Direct on studying “Complex interactions of multiple ecosystem services”
  - Assistant on constructing models for “Constructed wetlands in urban areas as biofuel production systems”
  - Assistant on data analysis for “Biogeochemical cycles on urban areas”
- FUNDINGS**
- China Postdoctoral Science Foundation funded project** (First-class funding 2012M510202), Administrator.
- The project focuses on modeling complex interactions of multiple ecosystem services by fuzzy Boolean networks
- National Science Foundation of China funded project** (71303217), Administrator.
- The project focuses on studying game dynamics in complex ecosystem networks.

## PUBLICATIONS

### Books

Chang, J. and Ge, Yin (2011) *Ecology*. Higher Education Press, Beijing. ISBN: 978704030570.

### Peer-reviewed journal articles

- Wang W., Chen M., **Min Y.**\*, and Jin X. (2016) Structural diversity effects of multilayer networks on the threshold of interacting epidemics. *Physica A* 443, 254–262.
- Min Y.**, Hu J., Wang W., Ge Y., Chang J., and Jin X. (2014) Diversity of multilayer networks and its impact on collaborating epidemics. *Physical Review E* 90, 062803.
- Min, Y.**, Chang, J., Jin, X., Ge, Y. (2013) The role of community mixing styles in shaping epidemic behaviors in weighted networks. *PLoS ONE* 8, e57100.
- Li, Y., **Min, Y.**, Zhu, X., Cao, J. (2013) Partner switching promotes cooperation among myopic agents on a geographical plane. *Physical Review E* 87, 022823.
- Min, Y.**, Chang, J., Ge, Y., Wu, X. (2012) Opportunity, challenge and countermeasure for studying relationship among multiple ecosystem services. *Chinese Science Bulletin* 57: 2137-2142. (In Chinese)
- Han, J., **Min, Y.**, Ge, H., Jin, X., Gao, B., et al. (2012) Construction of domain ontology for large-scale ecosystem nitrogen flux calculation. *Chinese Journal of Ecology* 31, 1562-1570. (In Chinese)
- Liu, D., Wu, X., Chang, J., Gu, B., **Min, Y.**, et al. (2012) Constructed wetlands as biofuel production systems. *Nature Climate Change* 2,190–194.
- Min, Y.**, Jin, X., Chen, M., Pan, Z., Ge, Y., Chang, J. (2011) Pathway knockout and redundancy in metabolic networks. *Journal of Theoretical Biology* 270, 63-69.
- Min, Y.**, Gong, W., Jin, X., Chang, J., Gu, B., Han, Z., Ge, Y. (2011) NCNA: Integrated platform for constructing, visualizing, analyzing and sharing human-mediated nitrogen biogeochemical networks. *Environmental Modelling & Software* 26, 678-679.
- Min, Y.**, Jin, X., Chang, J., Peng, C., Gu, B., Ge, Y., Zhong, Y. (2011) Weak indirect effects inherent to nitrogen biogeochemical cycling within anthropogenic ecosystems: A network environment analysis. *Ecological Modelling* 222, 3277-3284.
- Su, X., Jin, X., **Min, Y.**, Mo, L., Yang, J. (2011) A Curve Shaped Description of Large Networks, with an Application to the Evaluation of Network Models. *PLoS ONE* 6, e19784.

### Conference proceedings

- Su, X., Jin, X., **Min, Y.**, Li, Y. (2010) Estimating growth parameters for the Drosophila melanogaster protein interaction network by a network comparison method based on breadth-first search. *Proceeding of the 2010 International Conference on Intelligent Systems and Knowledge Engineering (ISKE), IEEE*, pp. 344-348.
- Min, Y.**, Jin, X., Su, X., Peng, B. (2006) Empirical Analysis of the Spatial Genetic Algorithm on Small-World Networks. In: Alexandrov, V.N., Albada, G.D., Sloot, P.M.A., Dongarra, J. (Eds.), *Proceeding of the International Conference on Computational Science 2006*, Springer Berlin Heidelberg, Berlin, Heidelberg, pp. 1032-1039.
- Peng, B., Jin, X., **Min, Y.**, Su, X. (2006) The Study on the sEMG Signal Characteristics of Muscular Fatigue Based on the Hilbert-Huang Transform. In: Alexandrov, V.N., Albada, G.D., Sloot, P.M.A., Dongarra, J. (Eds.), *Proceeding of the International Conference on Computational Science 2006*, Springer Berlin Heidelberg, Berlin, Heidelberg, pp. 140-147.
- Su, X., Jin, X., **Min, Y.**, Peng, B. (2005) Study on Asymmetric Two-Lane Traffic Model Based on Cellular Automata. In: Sunderam, V.S., Albada, G.D., Sloot, P.M.A., Dongarra, J.J. (Eds.), *Proceeding of the International Conference on Computational Science 2005*, Springer Berlin Heidelberg, Berlin, Heidelberg, pp. 599-606.

## SOFTWARE DEVELOPMENT

Author and maintainer of “NCNA: Integrated platform for constructing, visualizing, analyzing and sharing human-mediated nitrogen biogeochemical networks” in Java.  
Distributed Weibo (Twitter-like SNS in China) Data Crawler in Java.  
Mobile Data Database and Analysis Platform in Java with Mongo DB.

## SKILLS

### Languages

Chinese (native), English (fluent)

### Programming languages

Programming: Java, C/C++, Matlab, R, Python  
Typesetting: Latex, HTML, CSS  
Database: BerkeleyDB, MongoDB, SQL Server

## TEACHING EXPERIENCE

### Lecturer/Instructor

[Zhejiang University of Technology](#), Hangzhou **February 2013 - Now**

Undergraduate course (partly in English) at the College of Computer Science and Technology

- **Discrete Mathematics.** Chief instructor of 64 hrs class with course notes, final exam, homework and presentations.

[Zhejiang University](#), Hangzhou **May - June 2012**

Undergraduate course (partly in English) at the College of Life Sciences

- **Population dynamics – A Mathematical Introduction to Classical Models.** Designed and taught my own population dynamics course to undergraduate students – 9 hrs class, with course notes, final exam, homework and presentations.

### Teaching Assistant

[Zhejiang University](#), Hangzhou **March - June 2005**

Graduate courses at the College of Computer Science

- **Computation Theory**
- **Discrete Mathematics**