

学位: 博士

职称: 教授 博导

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个人主页:



教育经历:

1987年, 1990年分别在北京师范大学物理系获得学士和硕士学位。

1997年在中国科学院数学研究所计算机软件专业人工智能方向获博士学位。

工作经历:

1997-1999年在比利时布鲁塞尔自由大学(ULB)Sol vay研究所访问, 进行复杂系统研究。

2003-2005年在美国加州大学洛杉矶分校(UCLA)访问, 进行系统复杂信号网络研究。

1990年至今在北京师范大学工作。

研究兴趣:

复杂性系统理论, 信息的功能性应用, 基于agent建模研究合作, 信号网络, 遗传算法。

社会任职:

教学情况:

研究课题:

1. 01/2011-12/2011, 系统科学基础理论研究生暑期学校, 国家自然科学基金, 项目号: J1121006, 主持。
2. 01/2011-12/2013, 信息共享对群体合作的作用及人类行为实验验证, 国家自然科学基金, 项目号: 61074116, 主持。
3. 2011, 人类行为系统实验教学项目, 北京师范大学, 主持。
4. 2011-2013, 多个体微观相互作用与宏观集体行为模式研究, 北京师范大学自主科研基金, 主持。
5. 01/2010-12/2012, 我国若干国内重点职业人群心理压力和职业枯竭的评估、预警与干预示范研究。国家科技支撑计划, 项目号: 2009BAI77B04
6. 06/2009-12/2009, 第十四届异质相互作用主体经济学国际会议, 国家自然科学基金对外交流与合作项目, 项目号: 60910306018, 主持。
7. 2009-2011, 软件工程双语课程, 北京师范大学, 主持。

8. 01/01/2008-12/31/2010, Agent合作与基于朋友分布的信任模型, 国家自然科学基金, 项目号: 60774085, 主持。
9. 2007-2009, 多主体系统与演化算法, 北京高等教育精品教材建设项目, 北京市教委, 主持。
10. 01/01/2000-12/31/2003, 遗传算法收敛和收敛复杂性及在科学发现中的应用, 国家自然科学基金, 项目号: 60003018, 主持。
11. 01/01/2000-12/31/2000, 遗传算法收敛研究。国家教育部留学归国人员基金, 主持。
12. 06/2002-06/2002, 复杂系统国际会议, 国家自然科学基金, 项目号: 60216224。主持。
13. 01/01/2005-12/31/2007, 大脑皮层功能分区的自组织机制研究, 国家自然科学基金, 项目号: 70471080。参加。
14. 01/01/2003-12/31/2005, 企业规模幂律分布机制研究, 国家自然科学基金, 项目号: 70371072。参加。
15. 10/2001-10/2003, 生态和人力资源系统评价的信息共享, 十五攻关项目子课题。国家科技部, 项目号: 2001-BA608B14, 参加。

代表论著:

1. Qianqian Li, Tao Yang, Erbo Zhao, Xingang Xia, Zhangang Han, The Impacts of Information-Sharing Mechanisms on Spatial Market Formation Based on Agent-Based Modeling, *PlosOne*, March 6, 2013.
2. Dong Zhou, Dan Luo, Ruqian Lu, Zhangang Han, The Use of Tail Inequalities on the Probable Computational Time of Randomized Search Heuristics, *Theoretical Computer Science*, 436 (2012) 106-117, DOI: 10.1016/j.tcs.2012.01.010. SCI
3. Xiaocong Gan, Zhangang Han, Two general models that generate long range correlation, *Physica A: Statistical Mechanics and its Applications*, Volume 391, Issue 12, 15 June 2012, Pages 3477 - 3483. DOI: 10.1016/j.physa.2012.02.015. SCI
4. Jia, C. Xie, L. Gan, X. Liu, W. Han, Z., A Trust and Reputation Model Considering Overall Peer Consulting Distribution, *Systems, Man and Cybernetics, Part A: Systems and Humans, IEEE Transactions on*, Vol.: 42, Issue: 1, pp. 164 - 177. DOI: 10.1109/TSMCA.2011.2162497. SCI
5. Guozheng Zheng, Liutao Yu, Yuwei Feng, Zhuyi Han, Lisheng Chen, Shouwen Zhang, Dahui Wang, Zhangang Han, Seizure Prediction Model Based on Method of Common Spatial Patterns and Support Vector Machine, *Second International Conference on Information Science and Technology (ICIST 2012)*, pp. 29-34. EI
6. Xiaocong Gan, Yun Bao, Zhangang Han, Real Time Search Method in Nondeterministic Game—Ms. Pac-Man, *ICGA Journal*, Vol. 34, 4, 2011, pp. 209-222. SCI
7. Tao Yang, Qianqian Li, Xingang Xia, Erbo Zhao, Guo Liu, Zhangang Han, How Long Can You Enjoy Blackjack With 100 Chips, *International Journal of Modern Physics C*, Vol. 22, No. 10, pp. 1161-1171. DOI: 10.1142/S0129183111016804. SCI
8. Xiaocong Gan, Dahui Wang, Zhangang Han, A growth model that generates an n-tuple Zipf law, *Physica A*, Vol. 390, No. 5, pp. 792 - 800. SCI
9. Zhao Erbo, Jiang Shijie, Luo Dan, Bao Yun, Han Zhangang, Scaling Behavior of Time Series and an Empirical Indication to Financial Prediction, *ICIS '11 Proceedings of the 2011 10th IEEE/ACIS International Conference on Computer and Information Science*, pp. 126-131. DOI: 10.1109/ICIS.2011.28. EI
10. Dan Luo, Erbo Zhao, Zhangang Han, Overlapping Community Detection Based on Subgraph Centrality of Nodes, *2011 3rd International Conference on Computer Design and Applications*, Vol. 42, pp. 58-62. EI

11. Yi yang Li, Erbo Zhao, Zhangang Han, The Evolution of AI truistic Collective Behavior in Microorganisms with Local Exclusion Effect, *2011 IEEE International Conference on Intelligent Computing and Intelligent Systems* Vol . 2, pp. 292-296. EI
12. 基于共同空间模型的癫痫脑电检测预测的优劣, 北京师范大学学报(自然科学版), 2013, Vol. 49, 1
13. 李倩倩, 夏星昂, 韩战钢, 基于多主体建模方法研究空间市场效率的影响, 北京师范大学学报(自然科学版) 2012, Vol . 48, 6674-678. Impact factor analysis on spatial market efficiency based on agent-based modeling.
14. 江世杰, 韩战钢, 复杂系统研究中基于agent的模型化方法, 上海理工大学学报, 2011年第02期, Vol . 33, No. 2, pp. 124-129.
15. 佟庆涛, 周亚, 韩战钢, 李克强, 二维平面异质小世界网络上的囚徒博弈, 复杂系统与复杂性科学, 2011.
16. Lisheng Chen, Erbo Zhao, Dahui Wang, Zhangang Han, Shouwen Zhang, Cuiping Xu: Feature extraction of EEG signals from epilepsy patients based on Gabor Transform and EMD Decomposition. *ICNC 2010:* 1243-1247. EI
17. Erbo Zhao, Zhangang Han, Analyze long & mid-term trends of stock with Genetic Programming on moving average and turning points, *2nd International Conference on Advanced Computer Control (ICACC)*, pp. 87 - 91, 2010.
18. Lei Xie, Zhangang Han, Trust and reputation modeling of entry and exit in evolutionary Peer-to-Peer systems *The 2nd IEEE International Conference on Information Management and Engineering (ICIME)*, pp. 688 - 693 , 2010. EI
19. Yun Bao, Erbo Zhao, Xiacong Gan, Dan Luo, Zhangang Han, A review on cutting-edge techniques in Evolutionary Algorithms, *Proceedings of ICNC'09-FSKD'09*, 2009. EI
20. Zhao, E., Liu, G., Luo, D., Xia, X., Han, Z.: Evolving specialization, market and productivity in an agent-based cooperation model. In: *Proceedings of Complex'09, Lecture Notes ICST*, Springer-Verlag, Shanghai, China, 1564-1574, 2009. EI
21. Xiao-shan Gao, Dan-tong Ouyang, Ji-gui Sun, San-jiang Li, Tian-shun Yao, Ru-zhan Lu, Chun-yi Shi, Zhan-gang Han, Jue Wang, Cun-gen Cao, Ruqian Lu, "AI in China: A Survey," *IEEE Intelligent Systems*, vol . 23, no. 6, pp. 26-32, Nov/Dec, 2008. SCI
22. Ling Yang, Thomas M Vondriska, Zhangang Han, W Robb MacLellan, James N Weiss, Zhilin Qu, Deducing topology of protein-protein interaction networks from experimentally measured sub-networks, *BMC Bioinformatics* 2008 9:301 (3 July 2008). SCI
23. Xingang Xia, Hua Sun, Guo Liu, Zhangang Han, The Impact of Information Sharing Mechanism to Geographic Market Formation, *KES-AMSTA 2008*, Springer-Verlag, *LNAI* Vol . 4953, 604-613. EI
24. Zhangang Han, Thomas M. Vondriska, Ling Yang, W. Robb MacLellan, JamesN. Weiss, Zhilin Qu, Signal transduction network motifs and biological memory, *Journal of Theoretical Biology*, 2007. SCI
25. Lei Chai, Jiawei Chen, Zhangang Han, Zengru Di, Ying Fan: Emergence of Specialization from Global Optimization Evolution in a Multi-agent System. *International Conference on Computational Science (4)*, Springer-Verlag, *LNCS* 4490, 2007: 98-105. EI
26. Mehmet A. Orgun, Li yin Xue, Zhangang Han, Supporting Distributed Collaborative Work with Multi-versioning *Proceedings of The 10th International Conference on CSCW in Design*, May 3-5, 2006, Southeast University, Nanjing, China. EI
27. Ling Yang; Zhangang Han; Robb MacLellan; James N Weiss; Zhilin Qu, Linking Cell Division to Cell Growth in Spatiotemporal Model of The Cell Cycle, *Journal of Theoretical Biology*, 2006 Jul 7;241(1):120-33. SCI
28. Zhangang Han, Ling Yang, W. Robb MacLellan, James N. Weiss and Zhilin Qu, Hysteresis and Cell Cycle Transitions: How Crucial is it? *Biophysical Journal* Vol . 88, March 2005, 1626-1634. SCI
29. Ling Yang, W. Robb MacLellan, Zhangang Han, James N. Weiss and Zhilin Qu, Multisite Phosphorylation and Network Dynamics of Cyclin-Dependent Kinase Signalling in the Eukaryotic Cell Cycle, *Biophysical Journal* Vol . 86, June 2004, 3432-3443. SCI