



Curriculum Vitae Shu-Heng Chen

[\[Address\]](#) [\[Education\]](#) [\[Employment\]](#) [\[Edited Books and Volumes\]](#) [\[Referred Journal Articles\]](#)
[\[Journal Articles under Review\]](#) [\[Referred Chapters in Books\]](#) [\[Referred Papers in Proceedings\]](#)
[\[Invited Lectures and Plenary Speech\]](#) [\[Tutorial\]](#) [\[Conference Papers\]](#) [\[Others\]](#) [\[Academic Services\]](#)

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Education [Top](#)

- Ph.D. Department of Economics, University of California, Los Angeles, 1992
- M.A., Department of Mathematics, University of California, Los Angeles, 1991
- M.A., Department of Economics, National Taiwan University, 1985
- B.A., Department of Economics, National Chengchi University, 1981

Employment [Top](#)

- 2016-present, Vice President, National Chengchi University.
- 2015-present, Regional Editor Asia and Oceania, International Journal of Financial Engineering and Risk Management, Inderscience Publishers.
- 2013-present, Editorial Board Member of the Book Series on Physics of Society: Econophysics and Sociophysics, Oxford University Press.
- 2012-present, Editor of the Book Series on Computational and Quantitative Social Science, Wiley.
- 2012-present, Editor, *Economia Politica*, Journal of Analytical and Institutional Economics.
- 2012-present, Advisory Committee, Center for Research in Econometric Theory and Applications, National Taiwan University
- 2011-present, Scientific Committee of School of Social Sciences, University of Trento, Italy.
- 2011-present, Editors-in-Chief, Journal of Economic Interaction and Coordination (Springer)
- 2011-present, Advisory Board, University of Sheffield Management School Advisory Board, University of Sheffield, UK.
- 2008-present, Distinguished Professor, Department of Economics, National Chengchi University
- 2008-present, Organizer, Experimental Economics Lab, National Chengchi University
- 2004-present: Full Professor, Center for the Study of Banking and Finance, National Taiwan University
- 2004-present: Editors-in-Chief, New Mathematics and Natural Computing (World Scientific)
- 2000-present: Director, AI-Econ Research Center, National Chengchi University
- 2013-2015, Editor, International Journal of Financial Engineering and Risk Management, Inderscience Publishers.
- 2011-2014, Advisory Board Member, Society for Computational Economics.
- 2011-2012, Chair of the IEEE Computational Finance and Economics Technical Committee (IEEE's Computational Intelligence Society (CIS))
- 2011, May-June, Visiting Professor, Faculty of Economics, University of Trento, Italy
- 2009, Oct –Nov, *Lectio Magistralis* Visiting Professor, Faculty of Economics, University of Trento, Italy.
- 2009, July 10 -20, Visiting Professor, Faculty of Business, University of Technology at Sydney.

- 2008-2014, Dean of Office of International Cooperation, National Chengchi University
- 2007- 2010, Vice Chair of the IEEE Computational Finance and Economics Technical Committee (IEEE's Computational Intelligence Society (CIS))
- 2006-2010, Editor, Journal of Economic Interaction and Coordination (Springer)
- 2006-2008, Director, Center of International Education and Exchange, National Chengchi University
- 2005-2006: Adjunct Professor, Department of Finance, National Taiwan University
- 2004-2014: Associate Editor, Journal of Economic Behavior and Organization
- 2004-2008, International Journal of Innovational Computing & Information Control
- 2003-2004: Associate Editor, IEEE Transactions on Evolutionary Computation
- 2000-2008: Full Professor, Department of Economics, National Chengchi University
- 2000-2003: Adjunct Professor, Department of Economics, National Central University
- 1997, July 19-29: Consultant of the Department of Finance and Decision Sciences (FDS), School of Business, Hong Kong Baptist University
- 1996-1997: Visiting Professor, Department of Automatic Control Engineering, Huazhong University of Science & Technology, Wuhan, Hubei, P.R. China
- 1995-2000: Adjunct Professor, Department of Economics, National Central University
- 1995-1999: The Editor of Taiwan Journal of Political Economy
- 1992-1999: Associate Professor, Department of Economics, National Chengchi University
- 1991-1992 :Research Assistant of Professor John J. McCall and Professor Kumaraswamy Velupillai, Department of Economics, University of California, Los Angeles
- 1987-1990: Reader, Department of Economics, University of California, Los Angeles
- 1986-1987: Teaching Assistant, Department of Economics, University of California, Los Angeles
- 1986-1987: Research Assistant of Professor Edward Leamer, Department of Economics, University of California, Los Angeles
- 1984-1985: Research Assistant of Professor Gi-Li, Yen, Chung-Hua Institution for Economic Research

Awards and Grants

- 2014 Fulbright Senior Scholar, New School for Social Research, New York.
- 2014 NordSud International Prize, Fundation Pescarabruzzo, 2014.
- NCCU Distinguished Research Excellence Award: 2009, 2010, 2011
- NCCU Excellent Research Award: 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2012, 2013, 2014, 2015.
- NCCU College of Social Sciences Excellent Research Award: 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015.
- NCCU Faculty Excellent Service Award: 2006.
- Computer Society of the Republic of China: 1997.
- The Best Researcher of the Year, College of the Social Science, National Chengchi University, 1996.
- Ministry of Science and Technology (MOST) Grant: Project Title "Behavioral and Evolutionary Macroeconomics with Social-Network Embeddedness: Toward an Agent-Based Macroeconomic Laboratory", MOST 103-2410-H-004-009-MY3, 2014-2017.
- National Science Council Grant: Project Title "The Complexity of a Good Society: On the Study of Its Five Elements Using Agent-Based Models and Human-Subject Experiments", NSC 101-2410-H-004 -010 -MY2, 2012 – 2014.
- Taiwan Stock Exchange (TSE) Commissioned Research Project, "The Simulation and the Analysis of the Impacts of the Opening Market Transparency," 2012.
- Taiwan Stock Exchange (TSE) Commissioned Research Project, "The Analysis of the Impacts of the Closing Market Transparency," 2012.
- National Science Council Grant (Type A): 1994, 1995, 1996, 1997, 1998, 1999, 2001, 2002, 2003, 2004, 2005, & 2006.
- National Science Council Grant: Project Title "The International Influence Enhancement Pilot Project: From Agent-Based Computational Economics to Computational Social Science", NSC 98-2911-I-004 -007, 2009-2012.
- National Science Council Grant: Project Title "Emergent Complexity of Cognitive, Psychological and Cultural Factors: An Integrated Framework of Agent-Based Computational Economics, Experimental Economics and Neuroeconomics", NSC 98-2410-H-004-045-MY3, 2009 – 2012.
- National Science Council Grant: Project Title "The FP-7 Cook Project: The Human Factors of Emergent Social Intelligence: Empirical Evidence Based on Experimental Markets and Games", NSC 97-2915-I-004 -001, 2008-2009.
- National Science Council Grant: Project Title "From Agent Engineering to Market Design: An Integrated Platform Based on an Agent-Based Simulation Framework", NSC 95-2415-H-004-002-MY3, 2006 – 2009.

- National Science Council Grant on Project “Bounded Rationality and the Elasticity Puzzle: What Can We Learn from the Agent-Based Computational Capital Asset Pricing Model?”, NSC94-2415-H-004-003, 2005.
- National Science Council Grant on Project “Lottery Markets-Design, Micro-Structure, and Macro-Behavior: An ACE Approach”, NSC93-2415-H-004-005, 2004.
- National Science Council Grant on Project “Computational Intelligence in Economics and Finance: A Proposal to Promote Its Research Opportunities to Taiwan Academy”, NSC93-2420-H-004-003, 2004.
- National Science Council Grant on Project “Reading Guide to The Science of the Artificial by Herbert Simon”, NSC 92-2420-H-004-006, 2003.
- National Science Council Grant on Project “A functional-Modularity Approach to the Agent-based Computational Economic Modeling of Innovation”, NSC 92-2415-H-004-005, 2003.
- National Science Council Grant on Project “Simulating the Evolution of Portfolio Behavior in a Multiple-Asset Agent-Based Artificial Stock Market”, NSC 91-2415-H-004-005, 2002.
- National Science Council Grant on Project “Self-Organizing Maps as a Foundation for Charting or Geometric Pattern Recognition in Financial Time Series”, NSC 90-2415-H-004-018, 2001.
- National Science Council Grant on Project “Evolving Traders and the Business School with Genetic Programming: A New Architecture of the Agent-Based Artificial Stock Market”, NSC 89-2415-H004-008, 1999.
- National Science Council Grant on Project “Taiwan-German Joint Research Collaboration Program: Multi-Agent Simulation of Artificial Financial Market”, NSC87-I-2911-15, January-December, 1999.
- National Science Council Grant on Project “Simulating and Analyzing Financial Time Series with GP-Based Artificial Financial Markets”, NSC 88-2415-H-004-008, August 1998 - July 1999.
- National Science Council Grant on Project “Taiwan-German Joint Research Collaboration Program, NSC87-I-2911-15, January-December, 1998.
- National Science Council Grant on Project “Genetic Programming and Evolutionary Artificial Neural Nets in Financial Engineering”, NSC872415H004011, 1997.
- National Science Council Grant on Project “Evolutionary Computation in Computable General Equilibrium: An Integration of Genetic Algorithms, Genetic Programming and Artificial Neural Networks”, NSC862415H004022, 1996.
- National Science Council Grant on Project “Genetic Programming in Econometrics: An Initial Exploration”, NSC852415H004001, 1995.
- National Science Council Grant on Project “Genetic Programming and Bounded Rationality in Macroeconomics”, NSC842415H004001, 1994.
- National Science Council Grant on Project “Cellular Automata in Macroeconomic Modeling”, NSC830301H004002, 1993.
- Non-Citizen Tuition Waiver, UCLA, 1986–1989.
- Ministry-of-Education Scholarship, Taiwan, 1985–1987.
- Advanced Public Officer Examination. Passed as an Economic Analyst, 1981.

PUBLICATIONS: Edited Books and Volumes [Top](#)

1. The Handbook of Computational Economics and Finance, (with Mak Kaboudan and Ye-Rong Du), Oxford University Press, forthcoming.
2. Mathematics in Economics: Foundations, Philosophy and Epistemology (with Kumaraswamy Velupillai), World Scientific.
3. *Agent Based Modelling and Network Dynamics* (with Akira Namatame). Oxford University Press, 2016..
4. *Agent-Based Computational Economics: How the Idea Originated and Where It Is Going*. Routledge, 2015.
5. *Advances in Computational Social Science: The Fourth World Congress, Agent-Based Social Systems*, Volume 11, (with Takao Terano, Ryuichi Yamamoto, and Chung-Ching Tai), Springer, 2014.
6. Guest editor (with Dash Wu and David Olson), *Information Sciences*, a special issue on **Business Intelligence in Risk Management**, 256. 2014. [\[SCI\]](#)
7. Guest editor (with Sai-Ping Lee), **International Review of Financial Analysis**, a special issue on *Complexity and Non-Linearities in Financial Markets: Perspectives from Econophysics*, Vol 23, 2012. [\[EconLit, FLI\]](#)
8. *Agent-Based Approaches in Economic and Social Complex Systems VIII, Agent-Based Social Systems*, Volume 8, (with Takao Terano, Ryuichi Yamamoto), Springer, 2011.
9. *Multi-Agent Applications with Evolutionary Computation and Biologically Inspired Technologies: Intelligent*

- Techniques for Ubiquity and Optimization* (with Yasushi Kambayashi and Hiroshi Sato), IGI Global, Hershey PA, USA, 2011.
10. Guest editor (with Bob McKay and Xuan Hoai Nguyen), **International Journal on Knowledge Based Intelligent Engineering Systems**, a special issue on Genetic Programming, 12(1), 2008.
 11. *Computational Intelligence in Economics and Finance: Volume II*, (with P. P. Wang and Tzu-Wen Kuo), Springer-Verlag, 2007.
 12. *Simulated Evolution and Learning*, (with Tzai-Der Wang, Xiaodong Li, Xufa Wang, Hussein Abbass, Hitoshi Iba, Guoliang Chen, Xin Yao), **Lecture Notes in Computer Science**, (LNCS 4247), Springer. 2006. [SCIE]
 13. *Computational Economics: A Perspective from Computational Intelligence*, (with Lakhmi Jain and Chung-Ching Tai), **Computational Intelligence and its Application Series**, (series editors: Lakhmi Jain and Colin Fyfe), Idea Group Publishing, 2005.
 14. *Applications of Artificial Intelligence in Finance and Economics*, (with Jane Binner and Graham Kendall), Elsevier, 2004. [SSCI]
 15. *Multi-Agent for Mass User Support*, (with Koichi Kurumatani and Azuma Ohuchi), **Lecture Notes in Artificial Intelligence**, Springer, 2004.
 16. *Computational Intelligence in Economics and Finance*, (with P. Wang), **Series on Advanced Information Processing** (series editor: L. Jain), Springer-Verlag, 2002. [SCIE]
 17. *Genetic Algorithms and Genetic Programming in Computational Finance*, Kluwer. 2002.
 18. *Evolutionary Computation in Economics and Finance*, **Series on Studies in Fuzziness and Soft Computing**, Vol. 100 (series editor: J. Kacprzyk), Physica-Verlag, A Springer-Verlag Company, 2002.

PUBLICATIONS: Referred Journal Articles [Top](#)

1. "Heterogeneity in Generalized Reinforcement Learning and Its Relation to Cognitive Ability," (with Ye-Rong Du), *Cognitive Systems Research*, forthcoming. [SSCI]
2. "Transitional Student Admission Mechanism from Tracking to Mixing: An Agent-Based Policy Analysis," (with Connie Houning Wang and Bin-Tzong Chie), *Evolutionary and Institutional Economic Review*, forthcoming. DOI 10.1007/s40844-016-0058-x [Scopus]
3. "Information Aggregation and Computational Intelligence: Limits to Price Discovery," (with Ragupathy Venkatachalam), *Evolutionary and Institutional Economic Review*, forthcoming. DOI 10.1007/s40844-016-0048-z
4. "On the Complexity of the El Farol Bar Game: A Sensitivity Analysis," (with Umberto Gostoli), *Evolutionary Intelligence*, forthcoming. DOI 10.1007/s12065-016-0138-1. [Scopus]
5. "Matching Impacts of School Admission Mechanism: An Agent-Based Approach," (with Connie Houning Wang and Weikai Chen), *Eastern Economic Journal*, forthcoming. [Scopus]
6. "Coordination in the El Farol Bar Problem: The Role of Social Preferences and Social Networks," (with Umberto Gostoli), *Journal of Economic Interaction and Coordination*, 12(1): 59-93, 2017 [SSCI].
7. "Social Norms, Costly Punishment and the Evolution of Cooperation," (with Tong-Kui Yu and Honggang Li), *Journal of Economic Interaction and Coordination*, 11(2):313-343, 2016 [SSCI]
8. "The Optimal Pricing of a Market Maker in a Heterogeneous Agent Economy," (with Bin Guo, Wei Zhang, and Yongjie Zhang), *Finance Research Letters* 14:178–187, 2015 [SSCI].
9. "Network-Based Trust Games: An Agent-Based Model," (with Bin-Tzong Chie and Tong Zhang), *Journal of Artificial Societies and Social Simulation* 18 (3):5, <http://dx.doi.org/10.18564/jasss.2767> 2015 [SSCI].
10. "Limit Order Book Transparency and Order Aggressiveness at the Closing Call: Lessons from the TWSE 2012 New Information Disclosure Mechanism," (with Yi-Heng Tseng), *Pacific-Basin Finance Journal*, 35(A):241-272, 2015. [SSCI]

11. "Don't Get Mad, Get Even: Emotions in Ultimatum Games," (with Chia-Yang Lin), *Interdisciplinary Journal of Economics and Business Law*, 4(2): 36-72. 2015.
12. "The Use of Knowledge in Prediction Markets: How Much of Them Need He Know?" (with Bin-Tzong Chie), *Journal of Information Science and Engineering* 31(1):1-22. 2015 **[SCIE]**
13. "Neuroeconomics and Agent-Based Computational Economics," *International Journal of Applied Behavioral Economics* 3(2): 15-34. 2014.
14. "Competition in a New Industrial Economy: Toward an Agent-Based Economic Model of Modularity," (with Bin-Tzong Chie), *Administrative Sciences* 4(3):192-218. 2014.
15. "Social Networks and Macroeconomic Stability," (with Chia-Ling Chang and Ming-Chang Wen), *Economics: The Open-Access, Open-Assessment E-Journal*, Vol. 8, 2014-16. <http://dx.doi.org/10.5018/economics-ejournal.ja>. 2014-16 **[SSCI]**
16. "Business Intelligence in Risk Management: Some Recent Progresses," (with Dash Wu and D Olson), *Information Sciences*, 256:1-7. 2014. **[SCI]**
17. "Social Networks, Social Interaction and Macroeconomic Dynamics: How Much Could Ernst Ising Help DSGE? (with Chia-Ling Chang and Yi-Heng Tzeng), *Research in International Business and Finance* 30: 312-335. 2014. <http://dx.doi.org/10.1016/j.ribaf.2012.08.004> **[FLI]**
18. "Cognitive Capacity and Cognitive Hierarchy: A Study Based on Beauty Contest Experiments," (with Ye-Rong Du and Lee-Xiang Yang), *Journal of Economic Interaction and Coordination*, 9: 69-105. 2014. **[SSCI]**,
19. "Non-Price Competition in a Modular Economy: An Agent-Based Computational Model," (with Bin-Tzong Chie), *Economia Politica: Journal of Analytical and Institutional Economics*, XXX(3): 273-300. 2013. **[SSCI]**
20. "Interactions in the New Keynesian DSGE models: The Boltzmann-Gibbs machine and social networks approach," (with Chia-Ling Chang), *Economics: The Open-Access, Open-Assessment E-Journal*, 6(2012-26). 2012. Retrieved from <http://dx.doi.org/10.5018/economics-ejournal.ja.2012-26> **[SSCI]**
21. "To Whom and Where the Hill Becomes Difficult to Climb: Effects of Cognitive Capacity and Personality in Experimental DA Markets," (with Umberto Gostoli, Chung-Ching Tai, Kuo-Chuan Shih), *Advances in Behavioral Finance & Economics*, 2(2): 41-75. 2012.
22. "Microstructure Dynamics and Agent-based Financial Markets: Can Dinosaurs Return?" (with Michael Kampouridis and Edward Tsang), *Advances in Complex Systems*, 15 (supp 2). 2012. doi: 10.1142/S0219525912500609 **[SSCI, SCI]**.
23. "不同公司治理情境之股權評價：類神經模糊專家系統之應用"，(與高惠松, 李建然聯合發表)，*管理與系統*, 19(3): 378-408. 2012. **[TSSCI]**
24. "Interactions in DSGE Models: The Boltzmann-Gibbs Machine and Social Networks Approach," (with Chia-Ling Chang), *Economics*, 2012-26 **[SSCI]**.
25. "Econophysics: Bridges over a Turbulent Current," (with Sai-Ping Li), *International Review of Financial Analysis*, 23:1-10, 2012. **[EconLit, FLI]**
26. "Market Fraction Hypothesis: A Proposed Test," (with Michael Kampouridis and Edward Tsang), *International Review of Financial Analysis*. 23: 41-54, 2012. **[EconLit, FLI]**
27. "Liquidity Cost of Market Orders in the Taiwan Stock Market: A Study based on an Order-Driven Agent-Based Artificial Stock Market," (with Yi-Ping Huang, Min-Chin Hung, and Tina Yu), *International Review of Financial Analysis*, 23:72-80, 2012. **[EconLit, FLI]**.
28. "[Agent-Based Economic Models and Econometrics](#)," (with C.-L Chang, and Y.-R. Du), *Knowledge Engineering Review*, 27(2): 187-219, 2012. **[SCI]**
29. "Varieties of Agents in Agent-Based Computational Economics: A Historical and an Interdisciplinary Perspective," *Journal of Economic Dynamics and Control*, 36(1):1-25, 2012 **[SSCI]**.

30. "Do the ASEAN Countries and Taiwan Form a Common Currency Area?" (with Jane Binner, Ke-Hung Lai, James L. Swofford, and Andrew Mullineux), *Journal of International Money and Finance*, 30(7): 1429-1435, 2011 **[SSCI, FLI]**.
31. "Emergent Complexity in Agent-Based Computational Economics," (with Shu G Wang), *Journal of Economic Surveys*, 25(3): 527-546. 2011. **[SSCI]**
32. "Agents Learned, but Do We? Knowledge Discovery Using the Agent-Based Double Auction Markets," (with Tina Yu), *Frontiers of Electrical and Electronic Engineering (FEE) in China*, 6(1): 159-170. 2011
33. "Reinforcement Learning in Experimental Asset Markets," (with Yi-Lin Hsieh), *Eastern Economic Journal*, 37(1):109 – 133. 2011 **[EconLit]**
34. "On the Elasticity Puzzle: Would the Agent-Based Modeling Help?" (with Shu G Wang) *Advances and Applications in Statistical Sciences*, 2(2): 375-391, 2010.
35. "Corporate Governance and Equity Evaluation: Nonlinear Modeling via Neural Networks," (with H.-S Kao and J.-Z Lee), *International Research Journal of Finance and Economics*, 41: 68-92. 2010. **[EconLit]**
36. "Emergence of Scale-Free Networks in Markets," (with J.-J Tseng, S.-P. Li, and S.-C. Wang), *Advances in Complex Systems*, Vol 12, No. 1, pp. 87-97, 2009. **[SSCI, SCI]**
37. "Price Errors from Thin Markets and Their Corrections: Studies Based on Taiwan's Political Futures Markets," (with W.-S Wu), *Advances in Econometrics*, Vol. 24, pp. 1-25, 2009. **[SSCI]**
38. "Statistical Properties of an Experimental Political Futures Markets," (with S.-C. Wang, S.-P. Li, and C.-C Tai), *Quantitative Finance*, Vol. 9, No. 1, 2009, 9-16 **[SSCI]**
39. "The Future of Agent-Based Research in Economics," (with J. Barr, T. Tassier, L. Ussher, B. LeBaron, S. Sunder), *Eastern Economic Journal*, 34(4): 550-565, 2008. **[EconLit]**
40. "Network Topology of an Experimental Futures Exchange," (with S.-C. Wang, J.-J. Tseng, C.-C. Tai, K.-H. Lai, W.-S. Wu and S.-P. Li), *European Physics Journal B*, 62:105-111, 2008. **[SCI]**
41. "Software-Agent Designs in Economics: An Interdisciplinary Framework," *IEEE Computational Intelligence Magazine*, 3(4): 18-22, 2008. **[SCIE]**
42. "Risk Preference, Forecasting Accuracy and Survival Dynamics: Simulations Based on a Multi-Asset Agent-Based Artificial Stock Market", (with Y.-C. Huang), *Journal of Economic Behavior and Organization*, 67(3): 702-717, 2008. **[SSCI]**
43. "Genetic Programming: An Emerging Engineering Tool," (with Bob McKay and Xuan Hoai Nguyen), *International Journal of Knowledge-based Intelligent Engineering System*, 12(1): 1-2, 2008.
44. "On the Plausibility of Sunspot Equilibria: Simulations Based on Agent-Based Artificial Stock Markets," (with C.-C. Liao and P.-J. Chou), *Journal of Economic Interaction and Coordination*, Vol. 3, No. 1, pp 25-41, 2008. **[EconLit]**
45. "Lottery Markets Design, Micro-Structure, and Macro-Behavior: An ACE Approach," (with B.-C. Chie), *Journal of Economic Behavior and Organization*, 67(2): 463-480, 2008 . **[SSCI]**
46. "以決策樹之迴歸樹建構住宅價格模型 - 台灣地區之實證分析," (與郭子文, 裘厥庸聯合發表), *住宅學報*, Vol. 16, No. 1, pp. 1-20, 2007. **[TSSCI]**
47. "Relative Risk Aversion and Wealth Dynamics," (with Y.-C. Huang), *Information Sciences*, Vol. 177, Issue 5, pp. 1222-1229, 2007. **[SCI]**
48. "Computationally Intelligent Agents in Economics and Finance," *Information Sciences*, Vol. 177, Issue 5, pp. 1153-1168, 2007. **[SCI]**
49. "Graphs, Networks and ACE," *New Mathematics and Natural Computation*, Vol. 2, No. 3, pp. 299-314, 2006.
50. "Prediction of Bird Flu A(H5N1) Outbreaks in Taiwan by Online Auction: Experimental Results," (with S.-C. Wang, J.-J. Tseng, S.-P. Li), *New Mathematics and Natural Computation*, Vol. 2, No. 3, pp. 271-280, 2006.
51. "On the Selection of Adaptive Algorithms in ABM: A Computational Equivalence Approach," (with C.-C. Tai), *Computational Economics*, Vol. 28, No. 1, pp. 51-69, 2006. **[SSCI]**

52. [“自動化創新管理：演化計算方法的應用 \(Automatic Management of Innovation: The Application of Evolutionary Computation Method,”](#) (with B.-T. Chie), *Journal of Technology Management*, Vol. 11, No. 2, 2006, pp 97-126.
53. [“廠商創新與仿冒行為的演化--代理人基模型模擬與分析,”](#) (與張嘉玲聯合發表), *經濟與管理論叢*, Vol. 1, No. 2, 2005, pp. 143-162. **[EconLit]**
54. [“Computational Intelligence in Economics and Finance: Carrying on the Legacy of Herbert Simon,”](#) *Information Sciences*, Vol. 170, 2005, pp. 121-131. **[SCI]**
55. [“Agent-Based Computational Modeling of the Stock Price-Volume Relation,”](#) (with C.-C. Liao), *Information Sciences*, Vol. 170, 2005, pp. 75-100. **[SCI]**
56. [“Special Issue on Computational Intelligence in Economics and Finance.”](#) (With P. Wang). *Information Sciences*, Vol. 170, No. 1, 2005, pp.1-2. **[SCI]**
57. [“Trends in Agent-Based Computational Modeling of Macroeconomics,”](#) *New Generation Computation*, Vol. 23, No. 1, 2005, pp. 1-11. **[SCI]**
58. "Behavior Finance and Agent-Based Computational Finance: Toward an Integrating Framework," (with C.-C. Liao), *Journal of Management and Economics*, Vol. 8, No. 8. 2004.
59. [“A Genetic Programming Approach to Model International Short-Term Capital Flow,”](#) (with T. Yu and T.-W. Kuo), *Advances in Econometrics*, Vol. 17, 2004, pp. 45-70. **[SSCI]**
60. [“Statistical Analysis of Genetic Algorithms in Discovering Technical Trading Strategies,”](#) (with C.-Y. Tsao), *Advances in Econometrics*, Vol. 17. 2004, pp. 1-43. **[SSCI]**
61. [“Functional Modularity in the Fundamentals of Economic Theory : Toward an Agent-Based Economic Modeling of the Evolution of Technologynal,”](#) (with B.-T. Chie), *International Journal of Modern Physics B*, Vol. 18, No. 17-19, 2004, pp. 2376-2386.
62. [“Financial Innovation and Divisia Money in Taiwan: Comparative Evidence from Neural Network and Vector Error Correction Forecasting Models.”](#)(with J. Binner, A. Gazely and B.-T. Chie), *Journal of Contemporary Economic Policy*, Vol. 22, No. 2, 2004, pp. 213-224. **[SSCI]**
63. [“Trading Restrictions, Price Dynamics and Allocative Efficiency in Double Auction Markets: Analysis Based on Agent-Based Modeling and Simulations,”](#) (with C.-C. Tai), *Advances in Complex Systems*, Vol. 6, No. 3, 2003. pp. 283-302. **[SCIE]**
64. [“Agent-Based Artificial Markets in the AI-ECON Research Center: A Retrospect from 1995 to the Present,”](#) in *Systems, Control and Information*, Vol. 46, No. 9, 2002. pp. 23-30.
65. [“Financial Innovation and Divisia Monetary Indices in Taiwan: A Neural Network Approach,”](#) (with J. Binner and A. Gazely), *European Journal of Finance*, Vol. 8, pp. 238-247, 2002.
66. [“On the Emergent Properties of Artificial Stock Markets,”](#) (with C.-H. Yeh), *Journal of Economic Behavior and Organization*, Vol. 49, pp. 217-239, 2002. **[SSCI]**
67. [“Equilibrium Selection via Adaptation Using Genetic Programming to Model Learning in a Coordination Game,”](#) (with J. Duffy and C.-H. Yeh), *Electronic Journal of Evolutionary Modeling and Economic Dynamics*, Vol. 1, No. 1. 2002.
68. [“Market Diversity and Market Efficiency: The Approach Based on Genetic Programming.”](#) (with C.-H. Yeh), *Journal of Artificial Simulation of Adaptive Behavior (AISB Journal)* , Vol. 1, No. 1. 2002.
69. [“Toward an Integration of Social Learning and Individual Learning in Agent-Based Computational Stock Markets: The Approach Based on Population Genetic Programming,”](#) (with C.-H. Yeh), *Journal of Management and Economics*, Vol. 5, No. 5. 2001.
70. [“Testing for Non-Linear Structure in an Artificial Financial Market.”](#)(with T.Lux and M.Marchesi), *Journal of Economic Behavior and Organization*, Vol. 46, No. 3, pp. 327--342. 2001. **[SSCI]**
71. [“Evolving Traders and the Business School with Genetic Programming: A New Architecture of the Agent-Based Artificial Stock Market,”](#) (with C.-H. Yeh), *Journal of Economic Dynamics and Control*, Vol. 25, pp.363-393. 2001.

[SSCI]

72. ["Simulating Economic Transition Processes by Genetic Programming,"](#) (with C.-H.Yeh), *Annals of Operation Research*, Vol.97, pp.265-286.2000.
73. ["Simulating the Ecology of Oligopoly Games with Genetic Algorithms,"](#) (with C.-C.Ni), *Knowledge and Information Systems: An International Journal*, 2000 (2),pp.310-339.2000. [SCIE]
74. ["Hedging Derivative Securities with Genetic Programming,"](#) (with W.-C.Lee and C.-H.Yeh), *International Journal of Intelligent Systems in Accounting, Finance and Management*, Vol.4,No.8, pp.237-251.1999.
75. ["Modeling the Expectations of Inflation in the OLG Model with Genetic Programming,"](#) (with C.-H.Yeh) *Soft Computing*, Vol.3, No.2 pp.53-62.1999. [SCIE]
76. ["Estimating the Complexity Function of Financial Time Series: An Estimation Based on Predictive Stochastic Complexity,"](#) (with C.-W.Tan), *Journal of Management and Economics*, Vol.3 1999.
77. "Rethinking the Appeal of Evolution: Empirical Evidences from the Financial Applications of Genetic Algorithms." (with W.-Y. Lin), *Beijing Mathematics* 1998, Vol.4, N0.2, pp.161-175.
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Invited Plenary and Keynote Speech [Top](#)

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4. "From Digital Humanities to Computational Humanities: A Framework Integrated with Computational Social Science," the *Sixth International Conference on Digital Archives and Digital Humanities: Focusing on East Asia (DA-DH'2015)*, Panel on "Large-Scale Humanistic Studies and Discoveries with Computing Facilitators", National Taiwan University, Taipei, Taiwan, November 30-December 2, 2015.
5. "The Use of Knowledge in the Digital Society," *Conference on Complex Systems (CSS 2015)*, Tempe, Arizona, USA, September 28 –October 2, 2015.
6. "Agent-Based Modeling as a Foundation of Big Data," *The 9th International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS'15)*, Ramada Bintang Bali Resort, Bali, Indonesia, September 9-11, 2015.
7. "Trust, Network and Wealth: From Human-Subject Experiments to Agent-Based Modeling," *the 4th Asia-Pacific*

Econophysics Conference, Nanyang Technological University, Singapore, July 13-15, 2015.

8. "On the Naturally Allied Spiral of Agent-based Computational Economics and Experimental Economics," *First Cross-Straits Symposium on Economic Frontier and Policy Simulation in China*, China Southern Normal University, Guangzhou, China, November 15-16, 2014.
9. "ACE and EE: A Review of Some Recent Progresses," the *5th World Congress on Social Simulation*, São Paulo, Brazil, November 4-7, 2014.
10. "Competition in a New Industrial Economy: Toward an Agent-Based Economic Model of Modularity," (with Bin-Tzong Chie), *11th International Conference of Socionetwork Strategies: Understanding Complex Society from Agent-Based Simulation*, Research Institute for Socionetwork Strategies, Kansai University, Osaka, Japan, Feb 27, 2014.
11. "Macroeconomic Modeling in the Post-Financial Crisis Era: Opportunities and Challenges for the Agent-Based Computational Economics," *Workshop on Computational Finance and Economics*, Mexican Central Bank, Mexico City, Mexico. October 17, 2012
12. "On the Market Origin of Agent-Based Simulation in Economics: KISS, YES! But, Where?" *The Fifth Edition of Epistemological Perspectives on Simulation (EPOS V)*, Trinity University, San Antonio, Texas, October 10-12, 2012.
13. "Social Networks and Macroeconomics," *3rd International Workshop on Managing Financial Instability in Capitalist Economies (MAFIN 2012)*, Genoa, Italy, September 19-21, 2012.
14. "Predicting the Prediction Market: Would Smart Agents Help?", *AI, The Fundamental Social Aggregation Challenge, and the Autonomy of Hybrid Agent Groups, AAAI, 2012 Spring Symposia*, Stanford University, March 26-28, 2012.
15. "Social Networks, Social Learning and Macroeconomic Dynamics: How Much Could Ernst Ising Help DSGE?" *Research in International Business and Finance Symposium*, University of Limerick, Limerick, Ireland, November 24, 2011.
16. "Catastrophes or Dangerous Dynamics in Agent-Based Modular Economy," *3rd International Conference on Econophysics and Summer School on Teaching and Enterprise*, Department of Physics and School of Science, Loughborough University, UK, September 24-29, 2011.
17. "On the Cognitive Capacity and Cognitive Heterogeneity of Artificial Agents: From Laboratory Games to Financial Markets," *International Conference on Nonlinear Economic Dynamics and Financial Market*, South China Normal University and Guangzhou University, Guangzhou, China, March 31-April 2, 2011.
18. "Toward an autonomous-agents inspired economic analysis," *First Workshop on Quantitative Finance and Economics*, International Christian University, Tokyo, Feb 21-23, 2011.
19. "Cognitive Financial Agents: From Generalized Reinforcement Learning to Genetic Programming," *Conference on Quantitative Behavioral Finance*, University of Nice Sophia Antipolis, Nice, France, December 8-10, 2010.
20. "Varieties of Agents in Agent-Based Computational Economics: A Historical and an Interdisciplinary Perspective," *50th Shuangqing Science Forum "The Computational and Experimental Methods in Management Science"*, National Natural Science Foundation of China and Tianjin University, Tianjin, China, November 23-25, 2010.
21. "Microstructure Dynamics and Agent-Based Financial Markets: Can Dinosaurs Return?" *The Second Edition of the International Workshop on Managing Financial Instability in Capitalist Economies (MAFIN 2010)*, Reykjavik University, Reykjavik, Iceland, September 23-25, 2010.
22. "Varieties of Agents in Agent-Based Computational Economics: A Historical and an Interdisciplinary Perspective," *The 16th International Conference on Computing in Economics and Finance (SCE'2010)*, City University London, London, UK, July 13-17, 2010.
23. "Origin of Agent-Based Computational Economics: Agent-Based Modeling of Economic Experiments,"

International Conference on how and why economists and philosophers do experiments: dialogue between experimental economics and experimental philosophy (KEEL'2010), Kyoto Sangyo University, Kyoto, Japan, March 27-28, 2010.

24. "Agent-Based Computational Modeling in Economics: From the Origins to the Frontiers," *Facing Crisis: International Seminar on How to Develop Methods of Economic Research*, Beijing, China, September 10-11, 2009.
25. "Artificial Economic Agents with Heterogeneous Cognitive Capacity and Their Economic Consequences: Study Based on Agent-Based Double Auction Market Simulations," (with Tina Yu), *The 4th International Conference on Economic Science with Heterogeneous Agents (ESHIA'2009)*, Beijing Normal University, Beijing, China, June 18-20, 2009.
26. "Agent-based Simulation Models of Financial Markets," *The First Chinese Forum on Intelligent Finance*, Chinese Academy of Sciences, Beijing, China, Feb 26-28, 2009.
1. "Toward a Bottom-Up Risk Simulator: An Agent-Based Model of Lottery Tax Rates," *2008 International Conference on Business Intelligence and Financial Engineering (BIFE'2008)*, Changsha University of Science & Technology, Changsha, China, October 28-30, 2008.
2. "Agent-Based Economic Model and Econometrics," *International Workshop on Nonlinear Economic Dynamics and Financial Market Modelling*, Peking University, Beijing, China, October 9-11, 2008.
3. "Agent-Based Economic Models and Econometrics," *Econophysics Colloquium 2008*, Kiel University, Kiel, Germany, August 28-30, 2008.
4. "Agent-Based Modelling in Economics and Finance," *A CIFREM Tutorial Workshop on Agent-Based Modelling in Economics and Finance*, Trento University, Trento, Italy, May 19-20, 2008.
5. "Agent-Based Computational Economics and Econometrics," *The 11th Asia-Pacific Workshop on Intelligent and Evolutionary Systems, (IES 2007)*, National Defense Academy, Yokosuka, Japan, November 30-December 2, 2007.
6. "Genetic Programming and Agent-Based Computational Economics," *The 5th International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS'07)*, Waseda University, Tokyo, Japan, August 29-30, 2007.
7. "Economic Issues Presenting Challenges to Genetic Programming," *2007 Seoul BK Colloquium on Learning Complex Structures, (SCLCS 2007)*, Seoul National University, Seoul, Korea, August 22-25, 2007.
8. "On the Plausibility of Sunspot Equilibria: Simulations Based on Agent-Based Artificial Stock Markets," *The Second International Workshop on Intelligent Finance (IWIF-II)*, Chengdu, China, July 6--8, 2007.
9. "Trading with Genetic Programming: Evidence from Stock Markets and Foreign Exchange Markets," the plenary speech given at *the ICSC Congress on Computational Intelligence: Methods and Applications, (CIMA'05)*, Istanbul, Turkey, December 15-17, 2005.
10. "Evolving Economic Theory with Evolutionary Computation," the keynote speech given at the *2004 Conference on Intelligent Information Systems & the First Workshop on Evolutionary Computation Applications*, Aletheia University, Taipei, May 22, 2004.
11. "Agent-Based Computational Approach to Complex Adaptive Economic Systems," plenary speech given at the *First Cross-Strait Conference on Statistical Physics*, Yangzhou University, Yangzhou, China. August 27-31, 2003.
12. "Understanding Sunspots: An Analysis Based on Agent-Based Artificial Stock Markets," invited talk given at the *6th Taiwan International Symposium on Statistical Physics: Lattice Model and Complex System (StatPhys-Taiwan-2002)*, Academia Sinica, Taipei and National Chung Hsing University (Huei-Suen Farm), Taiwan, 26 May-1 June 2002.
13. "John Holland's Legacy in Economics," keynote speech to be given at *SECOND CeNDEF WORKSHOP on ECONOMIC DYNAMICS*, Center for Nonlinear Dynamics in Economics and Finance, Universiteit van

Amsterdam, January 4-6, 2001.

14. "On the Relevance of Genetic Programming to Evolutionary Economics," plenary speech given at the *4th Annual Meeting of the Japan Association for Evolutionary Economics* (**JAFEE'2000**), Surugadai Memorial Hall of Chuo University, Tokyo, Japan, March 25-26, 2000.
15. "Genetic Programming in Agent-Based Modeling of Artificial Stock Markets: Part 1," Open Lecture given in *Seminar on Computational Intelligence in Economics and Finance*, International Christian University, Tokyo, Japan, March 24, 2000.
16. "Simulating the Artificial Stock Markets with Spirit of Keynes and the Neo-Classical," plenary speech given at the *Workshop on Expectational and Learning Dynamics in Financial Markets*, University of Technology, Sydney, December 13-14, 1999.
17. "Genetic Algorithms in Complex Adaptive Economic Systems: Successes and Failures," plenary speech to be given at the *First Asia-Pacific Workshop on Genetic Algorithms and Applications* (**APGA'98**), Tsinghua University, Beijing, China. October 18-20, 1998.
18. "Genetic Programming Learning in the Cobweb Model with Inventory," (with C.-H. Yeh), plenary speech given at the IIGSS- CB The First Workshop on General Systems Methodology and Applications (**GSMA'96**), Huazhong University of Science and Technology, Wuhan, China, July 16-18, 1996.
19. "On the Cognitive Foundations of Economics: Evolution, Information, and Computation," paper presented at the *Symposium on the Development in Cognitive and Life Sciences in memory of Chao-Ting Chang*, Department of Philosophy, National Chung Cheng University, Chia-Yi, April 20-21, 1996.
20. "From the Hayek Hypothesis to Animal Spirits: The Phase Transition based on Competitive Experimental Markets", (with J. Kuo and C. Lin), paper presented at the conference "Inflation, Institutions and Information: Theories and History" held in Honor of Axel Leijonhufvud at the Central Bank of Uruguay, Montevideo, Uruguay, September 6-7 1993.

Tutorial [Top](#)

1. "Agent-based Computational Economics and Finance," College of Management and Economics, Tianjin University, Tianjin, China, June 14-18, 2016.
2. "Agent-based Computational Economics and Finance," College of Management and Economics, Tianjin University, Tianjin, China, July 4-9, 2015.
3. "ACE and EE: A Review of Some Recent Progresses," *the Summer School of the 19th Annual Workshop on the Economic Science with Heterogeneous Interacting Agents* (**ESHIA 2013**), Tianjin University, Tianjin, China, June 14, 2014
4. "Agent-based Computational Economics and Finance," College of Management and Economics, Tianjin University, Tianjin, China, June 9-13, 2014.
5. "Agent-based Computational Economics and Finance," College of Management and Economics, Tianjin University, Tianjin, China, Nov 26-30, 2012.
6. "Lecture Series on Agent-Based Computational Economics: A Historical and Interdisciplinary Review," School of Economics and Management, Harbin Institute of Technology, Harbin, China. Nov 7-9, 2011.
7. "Varieties of Agents in Agent-Based Computational Economics: From Calibrated Artificial Agents to Autonomous Agents," *Summer School on Intelligent Agents*, National Tsing-Hwa University, Hsinchu, Taiwan, June 28-July 1, 2010.
8. "Agent-Based Modeling in economics and econometrics", *APCTP (Asia Pacific Center for Theoretical Physics) School on Econophysics*, Pohang, Korea, August 24-27, 2009.

9. "Agent-Based Modeling in Finance: The Tradition of Human-Subject Experiments". *The Central European University (CEU) Summer School on Complex Systems and Social Simulations (CSS)*, Budapest, Hungary, July 23, 2009.
10. "Heterogeneous and Multi-Agent Modeling", *The 15th International Conference Computing in Economics and Finance, University of Technology*, Sydney, Australia, July 13-17, 2009.
11. "Agent-Based Computational Economics and Some of Its Recent Developments", 東吳學 95 年度教學卓越計畫計算智慧在經濟與財務上的發展與應用研習會，March 24, 2007
12. "Discovering Hidden Financial Patterns with Genetic Programming," (with T. Yu and T.-W. Kuo), *The 2nd IASTED International Conference on Financial Engineering and Applications (FEA 2004)*, MIT, Cambridge, November 8-10, 2004.
13. "Teaching Econ I with Agent-Based Modeling," *The Fourth Workshop on Nonlinear Physics*, National Chung Hsing University, Taichung, Taiwan, Dec. 20-22, 2002.
14. "Genetic Programming in Economics and Finance,"(with C.-H. Yeh), *Congress on Evolutionary Computation (CEC'2001)*, COEX, Seoul, Korea, May 27-30, 2001.
15. "Genetic Programming in Economics and Finance," *Congress on Evolutionary Computation (CEC'2000)*, La Jolla, California, U.S.A, July 16-19, 2000.

PUBLICATIONS: Conference Papers [Top](#)

1. "How Does Your Political Color "Dye" Your Social Expectation in Trust Games?" (with Yang-Teng Fan, Ray-May Hsung, Ho-Ling Liu, Ye-Rong Du, Tien-Tun Yang, Nai-Shing Yen, Chien-Te Wu), *1st Workshop on the Complex Dynamics of Financial Markets under Complex Information Environments (CIFMD 2016)*, Tianjin University, Tianjin, China, December 2-4, 2016.
2. "Agent-based Modeling of Chinese University Admission Mechanisms: From the Boston Mechanism to the Chinese Parallel Mechanism, Mission Accomplished?"(with Connie H. Wang), *INFORMS 2016 Annual Meeting*, Nashville, Tennessee, USA, November 12-17, 2016.
3. "Effects of Centralized Student Assignment Mechanisms on Educational Equality: An Agent-Based Model," (with Connie H. Wang and George R. Larkin), *The 2016 Duke Forest Conference: Economics in the Era of Natural Computationalism and Big Data*, Duke University, Durham, North Carolina, USA, November 11-13, 2016.
4. "Agent-Based Modeling as a Foundation of Big Data," (with Ragupathy Venkatachalam), *The 2016 Duke Forest Conference: Economics in the Era of Natural Computationalism and Big Data*, Duke University, Durham, North Carolina, USA, November 11-13, 2016.
5. "How Does Your Political Color "Dye" Your Social Expectation in Trust Games?" (with Yang-Teng Fan, Ray-May Hsung, Ho-Ling Liu, Ye-Rong Du, Tien-Tun Yang, Nai-Shing Yen, Chien-Te Wu), *82th International Atlantic Economic Conference (IAEC 2016)*, Washington D. C., USA, October 13 -16, 2016.
6. "Effects of Centralized Student Assignment Mechanisms on Educational Equality: An Agent-Based Model," (with Connie Wang), *82th International Atlantic Economic Conference (IAEC 2016)*, Washington D. C., USA, October 13 -16, 2016
7. "Chinese University Admission Mechanisms: Should We Defer Deferred Acceptance?" (with Connie Wang), *Second International Conference on Computational Social Science (IC²S²)*, Kellogg School of Management, Northern Western University, Evanston, Illinois, USA, June 22-26, 2016.
8. "Has Homo Economicus Evolved into Homo Sapiens? What Does the Corpus Linguistics Say?" (with Yawen Zou), *2016 Chinese Economists Society Annual Conference (CES 2016)*, Peking University HSBC Business

School, Shenzhen, China , June 10-12, 2016.

9. "Agent-Based Modeling of Chinese University Admission Mechanisms: from the Boston Mechanism to the Chinese Parallel Mechanism, Mission Accomplished?" (with Connie H Wang), *2016 Chinese Economists Society Annual Conference (CES 2016)*, Peking University HSBC Business School, Shenzhen, China, June 10-12, 2016.
10. "Agent-Based Modeling of a Non-Tatonnement Process for the Scarf Economy: The Role of Learning," (with Bin-Tzong Chie, Ying-Fang Kao, and Ragupathy Venkatachalam), *Fourth International Symposium in Computational Economics and Finance (ISCEF)*, Paris, France, April 14-16, 2016.
11. "Is the IS Puzzle a Puzzle or an Aggregation Bias?" (with Lian-Sheng Yang, Chia-Ling Chang, and Yi-Heng Tseng), *Fourth International Symposium in Computational Economics and Finance (ISCEF)*, Paris, France, April 14-16, 2016.
12. "Taiwan Limit Order Book Transparency and Order Aggressiveness at the Closing Call: Lessons from the TWSE 2012 New Information Disclosure Mechanism," (with Yi-Heng Tseng), *2016 International Conference of Financial Engineering (ICFE2016)*, Tsinghua University at Shenzhen, Shenzhen, China, April 9-10, 2016.
13. "Heterogeneity in Generalized Reinforcement Learning and Its Relation to Cognitive Ability," (with Ye-Rong Du), *2016 North America Conference of the Chinese Economists Society (CES)*, Sacramento, California, USA, April 2-3, 2016.
14. "Has Homo Economicus Evolved Into Homo Sapiens: What Does Corpus Linguistics Say?" (with Yawen Zou), *Digitarium 2016*, University of Alabama, Tuscaloosa, Alabama, March 3-5, 2016.
15. "Agent-Based Modeling of a Non-Tatonnement Process for the Scarf Economy," (with Bing-Tzong Chie, Selda Kao and Ragupathy Venkatachalam), *42th Eastern Economic Association Annual Conference (EEA 2015)*, Washington, DC., Feb 25 – 28, 2016.
16. "Herbert Simon and Agent-Based Computational Economics," (with Selda Kao), Society for the Advancement of Behavioral Economics (**SABE**) Session on "Herbert Simon, Commemorating the Centenary of Simon's Birth," *2016 Allied Social Sciences Association (ASSA) Meetings*, San Francisco, California, US, January 2-5, 2016.
17. "Evolutionary Economics of the Web: Can Computational Intelligence Make Sentiment Analysis Another Price Discovery Process?" *The 4th International Conference on Intelligent Finance (ICIF-IV)*, Chongqing, Sichuan, China, December 10-12, 2015.
18. "Herbert Simon and Agent-Based Computational Economics," (with Selda Kao), *85th Annual Meeting of the Southern Economic Association (SEA 2015)*, New Orleans, Louisiana, November 21-23, 2015.
19. "Even Brothers Keep Careful Accounts: An Experimental Repeated Trust Game and Political Identity," (with Ye-Rong Du, Ray-May Hsung, Tien-Tun Yang), *2015 Economic Science Association (ESA) North American Meeting*, Sheraton Dallas, Dallas, Texas, October 22-24, 2015.
20. "Political Preferences Modulate Neural Correlates of Trusting Decisions," (with Yang-Teng Fan, Ray-May Hsung, Ho-Ling Liu, Ye-Rong Du, Tien-Tun Yang, Nai-Shing Yen, Chien-Te Wu), *Neuroscience 2015*, Chicago, October 17-21, 2015.
21. "When to Imitate and How it Matters for Price Discovery: An Agent-Based Approach," (with BinTzong Chie, Ying-Fang Kao and Ragupathy Venkatachalam), *80th International Atlantic Economic Conference (IAEC 2015)*, Omni Parker House Hotel, Boston, USA, October 8 -11, 2015.
22. "Stability of General Equilibrium Under Learning in an Agent-based Scarf Economy," (with BinTzong Chie, Ying-Fang Kao and Ragupathy Venkatachalam), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
23. "Efficiency of the Experimental Prediction Market: Heterogeneous Information, Belief, and Personality," (with Bin-Tzong Chie and Chung-Yu Wu), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
24. "The Formation and Destruction of Trust: Experimental Evidence from Network-Based Trust Games," (with

- Chung-Ching Tai and Yi-Ting Yeh), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
25. "Heterogeneity in Experience-Weighted Attraction Learning and Its Relation to Cognitive Ability," (with Ye-Rong Du), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
 26. "On the Size Effect of a Simple Agent-Based Macroeconomic Model," (with Ying-Fang Kao and Ragupathy Venkatachalam), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
 27. "Matching Impact of School Admission Mechanisms: An Agent-Based Approach," (with Connie Wang and Weikai Chen), *21th International Conference on Computing in Economics and Finance (CEF 2015)*, Taipei, Taiwan, June 20-22, 2015.
 28. "Herbert Simon and Agent-Based Computational Economics," (with Selda Kao), *95th Annual Meeting of the Southwestern Social Science Association (SSSA 2015)*, Denver, Colorado, April 8-11, 2015.
 29. "On the Size Effect of a Simple Agent-Based Macroeconomic Models," (with Selda Kao, Bing-Tzong Chie, and Timo Mayer), *41th Eastern Economic Association Annual Conference (EEA 2015)*, New York City, Feb 26 – March 1, 2015.
 30. "Matching Impact of University Admission Mechanism: An Agent-Based Approach" (with Connie Wang and Weikai Chen), *41th Eastern Economic Association Annual Conference (EEA 2015)*, New York City, Feb 26 – March 1, 2015.
 31. "Trust, Network, Wealth Accumulation and Distribution: An Agent-Based Model," (with Bin-Tzong Chie), *14th SAET Conference on Current Trends in Economics*, Waseda University, Tokyo, Japan, August 19-21, 2014.
 32. "Mechanisms of Trust Formation under Different Conditions of Political Identity," (with Tien-Tun Yang, Ray-May Hsung, Ye-Rong Du, Yi-Jr Lin), *XVIII ISA World Congress of Sociology*, Yokohama, Japan, July 13-19, 2014.
 33. "Economics as an Experimental Science: A Review of Some Recent Progresses," *The 12th Taiwan International Symposium on Statistical Physics and Complex Systems (StatPhys-Taiwan-2014)*, Institute of Physics, Academia Sinica, Taipei, Taiwan, June 28-30, 2014.
 34. "The Formation of Risk-Sharing Social Networks," (with Tong Zhang and Yu Wu), *20th International Conference on Computing in Economics and Finance (CEF 2014)*, BI Norwegian Business School and Norges Bank, Oslo, Norway, June 22-24, 2014.
 35. "The Donor-Recipient Games: Agent-based vs. Equation-based Modeling," (with Wen-Jong Ma and Chia-Yao Tseng), *20th International Conference on Computing in Economics and Finance (CEF 2014)*, BI Norwegian Business School and Norges Bank, Oslo, Norway, June 22-24, 2014.
 36. "Agent-based Modeling of the Donor-Recipient Games," (with Wen-Jong Ma and Chia-Yao Tseng), the *19th Annual Workshop on the Economic Science with Heterogeneous Interacting Agents (WEHIA 2014)*, Tianjin University, Tianjin, China, June 14-19, 2014.
 37. "Aggregation Problem in the New Keynesian DSGE model," (with Chia-Ling Chang and Yi-Heng Tseng), the *19th Annual Workshop on the Economic Science with Heterogeneous Interacting Agents (WEHIA 2014)*, Tianjin University, Tianjin, China, June 14-19, 2014.
 38. "The Formation of Risk-Sharing Social Networks," (with Tong Zhang and Yu Wu), *2014 Chinese Economists Society Annual Conference (CES 2014)*, Jinan University, Guangzhou, China, June 14-15, 2014.
 39. "Spatial Modeling of Agent-Based Prediction Markets," (with Bin-Tzong Chie), *2014 Chinese Economists Society Annual Conference (CES 2014)*, Jinan University, Guangzhou, China, June 14-15, 2014.
 40. "Network-Based Trust Games: An Agent-Based Model," (with Bin-Tzong Chie and Tong Zhang), *2014 Chinese Economists Society Annual Conference (CES 2014)*, Jinan University, Guangzhou, China, June 14-15, 2014.
 41. "Agent-Based Modeling of School Admission Systems," (with Weikai Chen and Connie Wang), *2014 Chinese*

- Economists Society Annual Conference (CES 2014)*, Jinan University, Guangzhou, China, June 14-15, 2014.
42. "Don't Get Mad, Get Even: Emotions in Ultimatum Games," (with Chia-Yang Lin), 2014 NeuroPsychoEconomics Conference, Ludwig Maximilian University, Munich, Germany, May 29-30, 2014.
 43. "Heterogeneity in Experienced-Weighted Attraction Learning and Its Relation to Cognitive Ability," (with Ye-Rong Du), 2014 NeuroPsychoEconomics Conference, Ludwig Maximilian University, Munich, Germany, May 29-30, 2014.
 44. "Agent-Based Modeling of School Admission Systems: Comparison between the "Dark" and "Bright" Schemes" (with Connie Wang and Weikai Chen), *The 6th International Workshop on Emergent Intelligence on Networked Agents (WEIN'14)* at the *13th International Joint Conference on Autonomous Agents and Multi-Agent (AAMAS 2014)*, Paris, France, May 5, 2014.
 45. "Order Aggressiveness in Call Auction: Lessons from Closing Call's Information Disclosure New Mechanism in Taiwan," (with Yi-Heng Tseng and Chia-Ling Chang), *The 5th FMCGC Financial Markets and Corporate Governance Conference*, Queensland University of Technology, Brisbane, Australia, April 22-24, 2014.
 46. "Predicting Prediction Markets with Combined Forecasts," (with Chen-Yuan Tung, Chung-Ching Tai, Brian Chie, and Hung-Wen Lin), *Southwestern Society of Economists 2014 Annual Meeting*, Dallas, Texas, March 11-15, 2014.
 47. "Enhancing Interdisciplinary Teaching with Agent-Based Models," *40th Eastern Economic Association Annual Conference*, Boston Park Plaza Hotel, Boston, March 6-9, 2014.
 48. "Predicting Prediction Markets with Combined Forecasts," (with Chen-Yuan Tung, Chung-Ching Tai, Brian Chie, and Hung-Wen Lin), *40th Eastern Economic Association Annual Conference*, Boston Park Plaza Hotel, Boston, March 6-9, 2014.
 49. "Don't Get mad, Get even: Emotion in Ultimatum Games," (with Chia-Yang Lin), *2014 Asia-Pacific Meeting of the Economic Science Association*, University of Auckland Business School, Auckland, New Zealand, February 19-21, 2014.
 50. "On the Prediction Accuracy of Prediction Markets: Would the Spatial Distribution of Information Matter?" (with Bin-Tzong Chie), *International Workshop on Computational, Cognitive and Behavioral Social Science (CCB'2013)*, National Chengchi University, Taipei, Taiwan, Dec 6-8, 2013.
 51. "Agent-Based Modeling of Donor-Receipts Games," (with Wen-Jong Ma and Chia-Yao Tseng), *International Workshop on Computational, Cognitive and Behavioral Social Science (CCB'2013)*, National Chengchi University, Taipei, Taiwan, Dec 6-8, 2013.
 52. "On the Prediction Accuracy of Prediction Markets: Would the Spatial Distribution of Information Matter?" (with Bin-Tzong Chie), *The 2013 Winter Workshop on the Economic Science with Heterogeneous Interacting Agents (Winter ESHIA 2013)*, Nanyang Technology University, Singapore, Nov 18-19, 2013.
 53. "Agent-Based Modeling of Donor-Receipts Games," (with Wen-Jong Ma and Chia-Yao Tseng), *The 2013 Winter Workshop on the Economic Science with Heterogeneous Interacting Agents (Winter ESHIA 2013)*, Nanyang Technology University, Singapore, Nov 18-19, 2013.
 54. "NCCU International in Retrospect and Prospect: What Have We Done and What Have We Not?" *Taiwan Inclusive: Trends, Opportunities, and Challenges*, Miller Center, University of Virginia, Charlottesville, Virginia. November 15-16, 2013
 55. "Role of Price in Industry Dynamics: A Modular Perspective," (with Bin-Tzong Chie), *25th Annual European Association of Evolutionary Political Economy (EAEPE'2013)*, Paris, France, November 7-9, 2013.
 56. "Heterogeneity in Experienced-Weighted Attraction and Its Relation to Cognitive Ability," (with Ye-Rong Du and Lei Xieng Yang), *2013 Regional Economic Science Association (ESA) Conference*, Hotel Paradox, Santa Cruz, California, October 24-26, 2013.
 57. "NCCU International in Retrospect and Prospect: What Have We Done and What Have We Not?" the *34th Korea-*

- Sino Academic Conference*, Cheongju University, Cheongju, Korea, October 22, 2013.
58. "Trust, Growth, and Inequality: An Agent-Based Model," (with Bin-Tzong Chie), the *8th International Workshop on Agent-Based Approach in Economics and Social Complex Systems (AESCS 2013)*, Shibaura Institute of Technology, Tokyo, Japan, September 11-13, 2013.
 59. "Industrial Dynamics, Fluctuation and Growth in a Quality-Based, Agent-Based General Equilibrium Model," (with Bin-Tzong Chie), *19th International Conference on Computing in Economics and Finance (CEF 2013)*, Vancouver, BC, Canada, July 10-12, 2013.
 60. "Networks of Wealth and Wealth of Networks," (with Bin-Tzong Chie), the *18th Annual Workshop on the Economic Science with Heterogeneous Interacting Agents (WEHIA 2013)*, Reykjavik University, Reykjavik, Iceland, June 20-22, 2013
 61. "Cognitive Capacity and Earning Performance in Double-Auction Market Experiments" (with Chung-Ching Tai and Lee-Xieng Yang), *2013 Chinese Economists Society Annual Conference (CES 2013)*, Chengdu, China, June 8-10, 2013.
 62. "Trust, Culture and Development: What We May Learn" (with Tong Zhang), *2013 Chinese Economists Society Annual Conference (CES 2013)*, Chengdu, China, June 8-10, 2013.
 63. "From the El Farol Problem to a Good Society: How Do Social Networks and Cultures Affect What May Emerge?" (with Umberto Gostoli), the *2013 Chinese Economists Society Annual Conference (CES 2013)*, Chengdu, China, June 8-10, 2013.
 64. "How Cognitive Capacity Affects Our Market Performance? An Experimental Study Based on Working Memory Capacity," (with Chung-Ching Tai and Lee-Xieng Yang), *Bay Area Behavioral and Experimental Economics Workshop (BABEEW 2013)*, Santa Clara University, Santa Clara, California, May 4, 2013.
 65. "Cognitive Capacity and Cognitive Hierarchy: A Study Based on Beauty Contest Experiments," (with Ye-Rong Du and Lei Xieng Yang), *Symposium on Decision Science and Brain*, Research Center for Mind, Brain and Learning, National Chengchi University, Taipei, Taiwan. Feb 18, 2013.
 66. "Cognitive Capacity and Cognitive Hierarchy: A Study Based on Beauty Contest Experiments," (with Ye-Rong Du and Lei Xieng Yang), *2012 Regional Economic Science Association (ESA) Conference*, Westward Look Resort, Tucson, Arizona, November 16-17, 2012.
 67. "Transparency and Liquidity: A Revisit with Taiwan 2012 New Trading Mechanism," (with Yi-Heng Tseng and Chia-Ling Chang), *5th China Finance Review International Conference on Computing in Economics and Finance (CFRC'2012)*, Antai College of Economics and Management, Shanghai Jiaotong University, Shanghai, China, July 21-22, 2012.
 68. "Agent-based Prediction Market: Market Mechanism, Social Network and Social Intelligence," *18th International Conference on Computing in Economics and Finance (CEF 2012)*, Prague, Czech, June 27-June 29, 2012.
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 - *Advance in Econometrics*, 2004.
 - *Physica A*, 2004.
 - *Econometrics*, 2004.
 - *International Journal of Modern Physics B*, twice, 2004.
 - *Quantitative Finance*, 2002.
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 - *Genetic Programming and Evolvable Machines*, 2000.
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- **Referee for International Research Projects:**
 - Engineering and Physical Sciences Research Council (**EPSRC**), U.K., 2004
 - Engineering and Physical Sciences Research Council (**EPSRC**), U.K., 2002
 - The Swiss National Science Foundation, 2002
 - Research Grants Council of Hong Kong, 2002
 - The Leverhulme Trust, U.K., 2001
- **Referee for International Academic Promotions**
 - Professor in Information Modeling, Nottingham Business School, UK., 2002.
 - Executive Committee, Taiwanese Association of Artificial Intelligence (**TAAI**), 1996-2000.
 - Executive Committee, International Institute for General Systems Studies-China Branch (**IIGSS-CB**), 1996-.
- **Conference Chair for International Conferences**
 - Conference Chair, *The Sixth International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS'09)*, Taipei, Taiwan, Nov. 13-14, 2009.
 - Conference Chair, *The Seventh International Conference on Computational Intelligence in Economics and Finance (CIEF'2008)*, Taoyuan, Taiwan, Dec. 5-7, 2008.
 - Conference Chair, *The Sixth International Conference on Computational Intelligence in Economics and Finance (CIEF'2007)*, Salt Lake City, Utah, USA, Jul. 18-24, 2007.
 - Conference Chair, *The Fifth International Conference on Computational Intelligence in Economics and Finance (CIEF'2006)*, Kao-hsiung, Taiwan, Oct. 8-11, 2006.
 - Conference Chair, *The Fourth International Workshop on Computational Intelligence in Economics and Finance (CIEF'2005)*, Salt Lake City, Utah, USA, Jul. 21-26, 2005.
 - Conference Chair, *The Third International Workshop on Computational Intelligence in Economics and Finance (CIEF'2003)*, Cary, North Carolina, Sep., 29-30, 2003.
 - Organizing Committee, *Workshop on Multiagent for Mass-User Support (MAMUS)*, Acapulco, Mexico, August 9, 2003.
 - Session Organiser, Special Session: Applications of AI in Finance & Economics, *The 2003 International Conference on Artificial Intelligence (IC-AI'03)*, Las Vegas, USA, June 23-26, 2003.
 - Conference Chair, *The AAAI-02 Workshop on Multi-Agent Modeling and Simulation of Economic Systems (MAMSES-02)*, Edmonton, Alberta, Canada, 2002.
 - Conference Chair, *The Second International Workshop on Computational Intelligence in Economics and Finance (CIEF'2002)*, Research Triangle Park, North Carolina, 2002.
 - Conference Chair, *The First International Workshop on Computational Intelligence in Economics and Finance (CIEF'00)*, Atlantic City, New Jersey, 2000.
- **Program Committee for International Conferences**

- Program Committee, the 15th *International Conference on Computing Economics and Finance (CEF '09)*, Sydney, Australia, 2009.
- Program Chair, *the Sixth International Conference on Simulated Evolution and Learning (SEAL' 06)*, Hefei, Anhui, China, Oct. 15-18, 2006.
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- Scientific Committee, *the 12th International Conference on Computing Economics and Finance (CEF '06)*, Limassol, Cyprus, June 22-24, 2006.
- Programme Committee, *ICSC Symposium on Advanced Computing in Financial Markets (ACFM'2005)*, Istanbul, Turkey, December 12-14, 2005.
- Programme Committee, *The 2005 International Conference on Natural Computation (ICNC'05) and the 2005 International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'05)*, Hunan, China, Sep. 24--26, 2005.
- Programme Committee, *International Conference of Computational Intelligence and Multimedia Applications (ICCIMA'05)*, University of Nevada, Las Vegas, USA, August 16 - 18, 2005.
- Programme Committee, *The 11-th International Conference for the Society of Computational Economics (SCE'2005) on "Computing in Economics and Finance"*, Washington, D.C., June 26-29, 2005.
- Programme Committee, *The IASTED International Conference on Financial Engineering and Application (FEA-2004)*, Boston, Massachusetts, Nov. 8-11, 2004.
- Programme Committee, *The 2004 IFAC Symposium on Modeling and Control of Economic Systems*, University of Redlands, CA, July 28 - 31, 2004.
- Programme Committee, *The 10-th International Conference for the Society of Computational Economics (SCE) on "Computing in Economics and Finance"*, University of Amsterdam, July 8-10, 2004.
- Programme Committee, *5th International Symposium on Soft Computing for Industry with Applications of Financial Engineering (ISSCI 2004)*, Sevilla, Andalusia, Spain, June 28 - July 4, 2004.
- Program Committee, *The Sixth Annual Genetic and Evolutionary Computation Conference (GECCO-2004)*, Seattle, Washington, June 26-30, 2004.
- Program Committee, *The Third International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS'04)*, Kyoto University, Kyoto, Japan. May 27-29, 2004.
- Program Committee, *The 9th Annual Workshop on Economics with Heterogeneous Interacting Agents (WEHIA'2004)*, Kyoto University, Kyoto, Japan. May 27-29, 2004.
- Referee, *The Fifth Annual Genetic and Evolutionary Computation Conference (GECCO-2003)*, Chicago, Illinois, July 12-16, 2003.
- Programme Committee, *The 2003 Conference of the Society for Computational Economics (SCE 2003)*, University of Washington, Seattle, July 11-13, 2003.
- Programme Committee, *The IASTED International Conference on Financial Engineering and Application (FEA-2003)*, Banff, Canada, July 2-4, 2003.
- Scientific Committee, *The 8th Annual Workshop on Economics with Heterogeneous Interacting Agents (WEHIA'2003)*, Kiel, Germany, May 29-31, 2003.
- Programme Committee, *6th European Conference on Genetic Programming (EuroGP2003)*, Essex, UK, April 14-16, 2003.
- Programme Committee, *the 4th Asia-Pacific Conference on Simulated Evolution And Learning, (SEAL'02)*, Singapore, November 18-22, 2002.

- Programme Committee, *The 6th International Conferences on Complex Systems 2002 (CS02)*, Tokyo, Japan, Sep. 9-11, 2002.
- Programme Committee, *The First International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2002)*, Bologna, Italy, July 15-19, 2002.
- Program Committee, *The Fourth Annual Genetic and Evolutionary Computation Conference,(GECCO-2002)*, New York city, July 9-13, 2002.
- Scientific Committee, *The 2002 Conference of the Society for Computational Economics*, Aix en Provence, France, June 27-29.
- Programme Committee, *5th European Conference on Genetic Programming (EuroGP2002)*, Kinsale, Ireland.
- Programme Committee, *The 14th International Conference on Computer Applications in Industry and Engineering (CAINE-2001)*, Las Vegas, Nevada, November 27-29, 2001.
- Programme Committee, *The 4th International Conference on Computational Intelligence and Multimedia Applications (ICCIMA01)*, Shonan International Village, Yokosuka, Japan, October 30 - November 1, 2001.
- Programme Committee, *the 2001 IFAC Symposium on Modeling and Control of Economic Systems*, Klagenfurt, Austria, September 6-8, 2001.
- Programme Committee, *The Third Annual Genetic and Evolutionary Computation Conference (GECCO-2001)*, San Francisco, California, July 7-11, 2001.
- Programme Committee, *2001 Congress on Evolutionary Computation (CEC'2001)*, Seoul, Korea, May 27-30, 2001.
- Programme Committee, *JSAI 2001 International Workshop on Agent-based Approaches in Economic and Social Complex Systems (AESCS 2001)*, Matsue City, Shimane, Japan, May 21-22, 2001.
- Programme Committee, *4th European Conference on Genetic Programming (EuroGP2001)*, Lake Como (milan), Italy, April 18-20,2001.
- Programme Committee, *Second International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'2000)*, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong, December 13-15, 2000.
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- Programme Committee, *Australian Symposium on Applications of Artificial Intelligence in Industry (AIAPPS'2000)*, Melbourne, Australia.
- Programme Committee, Special Session on *The 2000 Congress on Evolutionary Computation (CEC'2000)*, San Diego, U.S.A., July 16-19, 2000.
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- Programme Committee, *The Third International Workshop of The International Institute for General Systems Studies (IIGSS)*, Beidaihe, Qinhuangdao, China, July 26-28, 1998.
- Programme Committee, *2nd World Congress on computational Intelligence (WCCI'98)*, Anchorage, Alaska, U.S.A., May 5-9, 1998.
- Programme Committee, *The 13th International Conference of the International Society on Computers and Their Applications, (CATA'98)*, Honolulu, Hawaii, U.S.A., March 18-20, 1998.
- Programme Committee, *Tenth International Conference on Computer Applications in Industry and Engineering (CAINE'97)*, Ramada Emily Morgan, San Antonio, Texas, USA, December 10 - 12, 1997.
- Programme Committee, *1997 International Conference on Genetic Programming (GP'97)*, Stanford, California, U.S.A., July 13-16, 1997.
- Programme Committee, *The Fourth IEEE International Conference on Evolutionary Computation (ICEC'97)*, April, 1997.
- Programme Committee, *The 12th International Conference of the International Society on Computers and Their Applications, (CATA'97)*, Tuscon, Arizona, U.S.A., Mar. 13-15, 1997.
- Programme Committee, *The First International Conference on Simulated Evolution and Learning (SEAL'96)*, Seoul, Korea, Nov. 9-11, 1996.
- Programme Committee, *1996 International Conference on Genetic Programming (GP'96)*, Stanford, California, U.S.A., July 28-31, 1996.
- Programme Committee, *1996 IIGSB-CB The First Workshop on General Systems Methodology and Applications (GSMA'96)*, July 16-18, 1996, Wuhan, China.

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