

**Haiping Xu**

Professor and Chairperson  
Computer and Information Science Department  
University of Massachusetts Dartmouth

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**A. Contact Information**

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**B. Research Interests and Expertise**

- Software Engineering, Distributed Computing, Formal Methods
- Artificial Intelligence, Multi-Agent System, Deep Learning
- Cloud Computing, Cloud Security, Privacy and Reliability
- Cybersecurity, Software Security and Reliability, Blockchain

**C. Education and Experience**

Ph.D.	Computer Science	University of Illinois at Chicago	2003
M.S.	Computer Science	Wright State University	1998
M.S.	Computer Engineering	Zhejiang University	1992
B.S.	Electrical Engineering	Zhejiang University	1989

- **Department Chairperson**, Computer and Information Science Department, University of Massachusetts Dartmouth, July 2018 ~ Present.
- **Director**, AI and Software Engineering Research (AISER) Laboratory, University of Massachusetts Dartmouth, January 2025 ~ Present.
- **Graduate Program Director (GPD)**, Computer and Information Science Department, University of Massachusetts Dartmouth, January 2018 ~ January 2019.
- **Professor (tenured)**, Computer and Information Science Department, University of Massachusetts Dartmouth, 2019 ~ Present.
- **Associate Professor (tenured)**, Computer and Information Science Department, University of Massachusetts Dartmouth, 2009 ~ 2019.
- **Assistant Professor**, Computer and Information Science Department, University of Massachusetts Dartmouth, 2003 ~ 2009.
- **Director**, Concurrent Software Engineering Laboratory, Computer and Information Science Department, University of Massachusetts Dartmouth, 2004 ~ Present. URL: <https://www.cis.umassd.edu/~hxu/csel/>
- **Research Assistant**, Concurrent Software Systems Laboratory, Computer Science Department, University of Illinois at Chicago, 1998 ~ 2003.
- **Research Assistant**, Parallel Computing Laboratory, Wright State University, 1996 ~ 1998.
- **Research Scholar**, Intelligent Systems Laboratory, Nanyang Technological University (Singapore), 1996.
- **Software Engineer**, Hewlett-Packard Company (China), 1995 ~ 1996.
- **Software Engineer**, Shen-Yan Systems Technology Inc. (China), 1992 ~ 1995.

#### D. Honorary Society Membership and Awards

1. **Senior Member** of the Association of Computing Machinery (ACM), Promoted in 2009 (ACM Professional Member since 2002)
2. **Senior Member** of the Institute of Electrical and Electronics Engineers (IEEE), Promoted in 2007 (IEEE Member since 1997)
3. IEEE *Editorial Excellence and Eminence Award* for outstanding contributions as an Associate Editor of the IEEE Transactions on Cloud Computing, December 2019.
4. IEEE *Excellent and Valuable Service* as Program Chair of the 2017 IEEE International Conference on Smart City Innovations, August 2017.
5. IEEE *Excellent and Valuable Service* as Program Chair of the 5th IEEE International Conference on Mobile Cloud Computing, Service and Engineering, April 2017.
6. Recognition of *Dedicated Leadership* as Program Chair of the 27th International Conference on Software Engineering and Knowledge Engineering, July 2015.
7. Best Paper Award at SEKE 2015, Pittsburgh, USA, July 2015.
8. Who's Who Among America's Teachers, 11th Edition, 2007.
9. Marquis Who'sWho in Finance and Business, 37th Edition, 2009-2010.
10. Marquis Who'sWho in America, 62nd Edition, 2008, and 63rd Edition, 2009.
11. Outstanding Ph.D. Thesis Award, University of Illinois at Chicago, IL, 2004.
12. University Fellowship, University of Illinois, Chicago, IL, 2001.
13. Dayton Area Graduate Studies Institute (DAGSI) Scholarship, Dayton, OH, 1998.
14. Outstanding Graduate Student Award, Zhejiang University, China, 1992.
15. Guang-Hua National Merit Scholarship, Hangzhou, China, 1990.
16. Graduate School Scholarship, Zhejiang University, Hangzhou, China, 1990.
17. The "Mixed Class" for talented students, Zhejiang University, Hangzhou, China, 1986.
18. Zhejiang University Juvenile Class for Gifted Students (aged 15 or below), China, 1985.

#### E. Contribution to Teaching, Curriculum Development, and University Services (UMass Dartmouth)

##### Teaching and Curriculum Development

- Reviewed and approved curriculum changes for the CIS minor programs, Spring 2026.
- Reviewed and approved curriculum changes for the DSC minor program, Spring 2026.
- Reviewed and approved a new online DSC-MS program through the DSC Program Steering Committee.
- Reviewed and approved curriculum changes for the B.S. in Computer Science program, Spring 2025.
- Reviewed and approved new course CIS 264 (Foundations of Secure Computing), Spring 2025.
- Reviewed and approved new course CIS 544 (Cyber Defense and Operations), Spring 2025.
- Reviewed and approved course revisions for CIS 272 (Introduction to Computing Systems), Spring 2025.
- Co-developed major curriculum changes for the M.S. in Data Science program, Spring 2024.
- Reviewed and approved new course CIS 470 (Software Testing and Automation), Fall 2023.
- Developed Software Engineering Concentration for Computer Science majors, Fall 2022.
- Co-developed new course CIS 432 (Software Architecture and Design), Fall 2022.
- Co-developed ABET Self-Study Report for the B.S. in Computer Science program, AY 2021-22.
- Co-developed Artificial Intelligence Minor (CSAI-MN), AY 2020-21.
- Co-developed Concentration in Artificial Intelligence (CISAI), AY 2020-21.
- Developed Cybersecurity Concentration for Computer Science majors (CYBRCS), AY 2019-20.
- Developed Computer Science Cybersecurity Minor (CYCS-MN), AY 2019-20.
- Co-developed Concentration in Computer Game Design (CISGD), AY 2019-20.
- Reviewed and approved nine (9) newly proposed cybersecurity courses, AY 2019-20.
- Participated in preparing the "CD Area of Study" section in the application for Center for Academic Excellence in Cyber Defense Research (CAE CD-R), AY 2019-20.
- Co-developed AQAD Self-Assessment Report for the M.S. in Computer Science program, AY 2018-19.

- Participated in developing MSCS Online Preparatory Program (OPP), Spring 2015.
- Participated in developing Data Science Interdisciplinary Program, Fall 2014.
- Participated in developing MSCS Online Graduate Program (OGP), Fall 2014.
- Developed Software Engineering Certificate for MS in CS program, Fall 2013.
- Developed new course CIS 461 (Formal Methods for Software Engineering), Fall 2012.
- Developed Software Engineering Option for BS in CS program, Spring 2017 (with Dr. Jan Bergandy, Dr. Paul Bergstein, and Dr. Boleslaw Mikolajczak).
- Proposed new course CIS 461 (Formal Methods for Software Engineering), Spring 2007.
- Proposed new course CIS 264 (Software Quality Assurance and Testing), Spring 2007.
- Developed new course CIS 582 (Advanced Software Engineering), Spring 2006.
- Developed new course CIS 602 (Special Topics: Software Eng. of Distributed Systems), Fall 2004.
- Co-developed new course CIS 563 (Multi-Agent Systems), Spring 2005.

### University Services

- Data Science Program Steering Committee (2023 ~ Present)
- **Chair**, Ph.D. in Computer Science and Information Systems Committee, Ph.D. in EAS (2013 ~ Present)
- EAS Advising/Admissions/Curriculum Committee (AACC) (2013 ~ Present)
- **Chair**, CIS Lab Committee, Computer and Information Science Department (2013 ~ Present)
- ABET and Program Assessment Committee (PAC), CIS Department (2018 ~ Present)
- College Academic Council, College of Engineering (2013 ~ 2020)
- Academic Quality Assessment and Development (AQAD) Committee, CIS Department (2018 ~ 2019)
- **Chair**, Administrative Assistant Search and Screen Committee, CIS Department (2018 ~ 2019)
- **Graduate Program Director (GPD)**, CIS Graduate Curriculum Committee (GCC) (2018 ~ 2019)
- **Chair**, CIS Undergraduate Curriculum Committee (UCC) (2015 ~ 2018)
- College Curriculum Committee, College of Engineering (2015 ~ 2018)
- **Graduate Program Advisor**, CIS Graduate Curriculum Committee (GCC) (2015 ~ 2020)
- Software Engineering Full-Time Lecturer Search and Screen Committee (2021 ~ 2022)
- Data Analytics Tenure-Track Faculty Search and Screen Committee (2019 ~ 2020)
- Cybersecurity Full-Time Lecturer Search and Screen Committee (2019 ~ 2020)
- Cybersecurity Tenure-Track Faculty Search and Screen Committee (2018 ~ 2019)
- Software Engineering Tenure-Track Faculty Search and Screen Committee (2018 ~ 2019)
- **Chair**, Data Science Tenure-Track Faculty Search and Screen Committee, CoE (2015 ~ 2016)
- Data Science Tenure-Track Faculty Search and Screen Committee, College of Engineering (2014 ~ 2015)
- Fulltime Lecturer Search and Screen Committee, College of Engineering (Summer 2014)
- Big Data Tenure-Track Faculty Search and Screen Committee, College of Engineering (2013 ~ 2014)
- Tenure-Track Faculty Search and Screen Committee, College of Engineering (2011 ~ 2012)
- Ph.D. Program Exploratory Committee, College of Engineering (2009 ~ 2010)
- Tenure-Track Faculty Search and Screen Committee, College of Engineering (2009 ~ 2010)
- CIS Undergraduate Curriculum Committee (UCC) (2003 ~ 2018)
- CIS Graduate Curriculum Committee (GCC) (2003 ~ 2018)
- MATH Competition Planning Committee (2011 ~ 2012)
- Faculty Senate Committees: Admissions Committee (2008 ~ 2011)
- Faculty Senate Committees: Library Committee (2004 ~ 2007)

### **F. Graduate Students Supervised**

At UMass Dartmouth, I supervised 34 MS Theses (33 completed), and 83 MS Projects (81 completed). I also supervised / co-supervised 6 Ph.D. Dissertations (4 completed).

## G. Grant Activities

1. Co-PI: Haiping Xu, **Office of Naval Research (ONR) Grant, MUST IV**, "Knowledge Augmented Adaptive Learning of Evolving Models for Large Sensor Data Streams," Collaborative Research with Donghui Yan (Co-PI) and Ramprasad Balasubramanian (PI), Industry Partner: Naval Undersea Warfare Center (NUWC), Division Newport, January 2023 - December 2026.
2. Faculty Supervisor: Haiping Xu, Student: William Girard, **OUR Summer Research Grant**, "Developing Real-Time Evolving Deep Learning Models for Hydro-Plant Operations," May 2023 - August 2023.
3. Co-PI: Haiping Xu, **2020 University Industry Collaborative Seed Fund**, "Reducing the Cost of Data in Large-Scale Data-Driven Learning," Collaborative Research with Donghui Yan (PI) and Ming Shao (Co-PI), Industry Partner: DiDi Research America, March 2020 - March 2021.
4. PI: Haiping Xu, **2017 Creative Economy Fund**, "Popularity of Cultural Products in Online Social Media," Collaborative Research with University of Massachusetts Boston (PIs: Jurui Zhang and Raymond Liu), July 2017 - June 2018.
5. PI: Haiping Xu, **Provost Travel Grant**, International Conference on Software Engineering and Knowledge, July 2015.
6. PI: Haiping Xu, **NSF Grant**, "CT-ISG: Agent-Based Trust Management for Trust Re-Evaluation in Online Auctions," Collaborative Research with University of Illinois at Chicago, August 2007 ~ July 2010.
7. PI: Haiping Xu, **Marine Corps Grant**, "Ontology-Based Dynamic Service Discovery for Fault-Tolerant Service-Oriented Systems," Collaborative Research with Ramprasad Balasubramanian (Co-PI), Industry Partner: Naval Undersea Warfare Center (NUWC), Division Newport, May 2008 ~ October 2008.
8. PI: Haiping Xu, **Chancellor's Research/UMass Healey Endowment Grant**, "State-Based XML Firewall for Service-Oriented Systems," July 2007 ~ June 2008.
9. PI: Haiping Xu, **Research Seed Initiative Fund (RSIF)**, "Agent-Based Trustworthy Service-Oriented Architecture," July 2007 ~ June 2008.
10. PI: Haiping Xu, **Chancellor's Research/UMass Healey Endowment Grant**, "A Trustworthy Agent Based Online Auction System," July 2006 ~ June 2007.
11. PI: Haiping Xu, **Provost Faculty Travel Grant**, International Conference on Software Engineering and Knowledge Engineering, July 2007 & July 2008.
12. PI: Haiping Xu, **Provost Faculty Travel Grant**, International Conference on Communication, Network and Information Security, October 2006.
13. PI: Haiping Xu, **Research Seed Initiative Fund (RSIF)**, "Prototyping Role-Based Large Scale, Complex Multi-Agent Applications," Collaborative Research with Xiaoqin Zhang (Co-PI), February 2005 ~ January 2006.

## H. Scholarship (\*: Student Co-author)

### Journal Publications

1. Snehashish Srivastava\*, Haiping Xu, Donghui Yan, and Ramprasad Balasubramanian, "Early Warning for Maritime Storm Formation Using Temporal Autoencoder-Based Anomaly Detection," *Journal of Engineering Research and Sciences (JENRS)*, Special Issue on Multidisciplinary Sciences & Advanced Technology (SI-MSAT 2026), Vol. 5, No. 5, May 2026, pp. 19-29. DOI: [10.55708/js0505003](https://doi.org/10.55708/js0505003)
2. Spoorthi Bhat\*, Veda Sahaja Bandi\*, Haiping Xu, and Joshua Carberry\*, "Integrating Deep Learning Nodes into an Augmented Decision Tree for Automated Medical Coding," *Analytics*, Vol. 5, No. 1, Article 11, 2026, pp. 1-27. DOI: [10.3390/analytics5010011](https://doi.org/10.3390/analytics5010011)
3. William Girard\*, Haiping Xu, and Donghui Yan, "SeADL: Self-Adaptive Deep Learning for Real-Time Marine Visibility Forecasting Using Multi-Source Sensor Data," Feature Paper, *Sensors*, Special Issue on Innov. Tech. & Appli. in Engg. Sensing via Deep & ML, Vol. 26, No. 2, Article 676, January 2026, pp. 1-28. DOI: [10.3390/s26020676](https://doi.org/10.3390/s26020676).

4. David Degbor, [Haiping Xu](#), Pratiksha Singh, Shannon Gibbs, and Donghui Yan, "StradNet: Automated Structural Adaptation for Efficient Deep Neural Network Design," *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, Special Issue on Innovation in Comp., Engg. Sci. & Tech. 2025, Vol. 10, No. 6, pp. 29-41. DOI: [10.25046/aj100603](https://doi.org/10.25046/aj100603).
5. Joshua Carberry\* and [Haiping Xu](#), "Explainable ICD Code Assignment Using Knowledge-Based Sentence Extraction and Deep Learning," To appear in *International Journal of Semantic Computing (IJSC)*, 2025. DOI: [10.1142/S1793351X25500011](https://doi.org/10.1142/S1793351X25500011)
6. Joshua Carberry\*, John Rahme\*, and [Haiping Xu](#), "Real-Time Rejuvenation Scheduling for Cloud Systems with Virtualized Software Spares," *The Journal of Systems & Software (JSS)*, Vol. 217, November 2024, 112168, pp. 1-15. DOI: [10.1016/j.jss.2024.112168](https://doi.org/10.1016/j.jss.2024.112168)
7. Joshua Carberry\* and [Haiping Xu](#), "GPT-Enhanced Hierarchical Deep Learning Model for Automated ICD Coding," *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, July-August 2024, Vol. 9, No. 4, pp. 21-34. DOI: [10.25046/aj090404](https://doi.org/10.25046/aj090404)
8. Brandon Wetzel\* and [Haiping Xu](#), "Deploying Trusted and Immutable Predictive Models on a Public Blockchain Network," *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, May-June 2024, Vol. 9, No. 3, pp.72-83. DOI: [10.25046/aj090307](https://doi.org/10.25046/aj090307)
9. Marcos Felipe\* and [Haiping Xu](#), "HistoChain: Improving Consortium Blockchain Scalability Using Historical Blockchains," *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, May-June 2023, Vol. 8, No. 3, pp. 89-99. DOI: [10.25046/aj080311](https://doi.org/10.25046/aj080311) [Featured Paper of ASTESJ, 2024]
10. [Haiping Xu](#), Ran Wei\*, Richard Degroof\*, and Joshua Carberry\*, "Evaluating Online Products Using Text Mining: A Reliable Evidence-Based Approach," *International Journal of Semantic Computing (IJSC)*, December 2022, Vol. 16, No. 4, pp. 585-611. DOI: [10.1142/S1793351X22500064](https://doi.org/10.1142/S1793351X22500064)
11. Alvin Thamrin\*, [Haiping Xu](#), and Rui Ming\*, "Cloud-Based Hierarchical Consortium Blockchain Networks for Timely Publication and Efficient Retrieval of Electronic Health Records," *Advances in Science, Technology and Engineering Systems Journal (ASTESJ)*, April 2022, Vol. 7, No. 2, pp. 179-190. DOI: [10.25046/aj070218](https://doi.org/10.25046/aj070218)
12. Donghui Yan, Zhiwei Qin, Songxiang Gu, [Haiping Xu](#), and Ming Shao, "Cost-Sensitive Selection of Variables by Ensemble of Model Sequences," *Knowledge and Information Systems (KAIS)*, May 2021, Vol. 63, No. 5, pp. 1069-1092. DOI: [10.1007/s10115-021-01551-x](https://doi.org/10.1007/s10115-021-01551-x)
13. Lexin Zhou, [Haiping Xu](#), and Ye Li, "A Novel Online Mechanism for Honest Bilateral Bidding Strategies on Ridesharing Platforms," *Chinese Journal of Management Science (CJMS)*, Vol. 28, No. 3, March 2020, pp. 201-212.
14. [Haiping Xu](#), Yuhan Zhang\*, and Richard de Groof\*, "A Feature-Based Sentence Model for Evaluation of Similar Online Products," *Journal of Electronic Commerce Research (JECR)*, Vol. 19, No. 4, November 2018, pp. 320-335
15. [Haiping Xu](#) and Deepti Bhalerao\*, "Reliable and Secure Distributed Cloud Data Storage Using Reed-Solomon Codes," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 25, Nos. 9 & 10, December 2015, pp. 1611-1632.
16. Jean Rahme\* and [Haiping Xu](#), "A Software Reliability Model for Cloud-Based Software Rejuvenation Using Dynamic Fault Trees," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 25, Nos. 9 & 10, December 2015, pp. 1491-1514.
17. [Haiping Xu](#), "Future Research Directions of Software Engineering and Knowledge Engineering," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 25, No. 2, 2015, pp. 415-421.
18. Zhenhua Yu, Yuanli Cai, Xiao Fu, Wenjun Xie, and [Haiping Xu](#), "Formal Modeling and Analyzing High-Confidence Software of Cyber-Physical Systems," *Systems Engineering - Theory & Practice (SETP)*, July 2014, Vol. 34, No. 7, pp. 1857-1867 (in Chinese).
19. Daniel F. Fitch\* and [Haiping Xu](#), "A RAID-Based Secure and Fault-Tolerant Model for Cloud Information Storage," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 23, No. 5, 2013, pp. 1-28.

20. Benjamin J. Ford\*, [Haiping Xu](#), and Iren Valova, "A Real-Time Self-Adaptive Classifier for Identifying Suspicious Bidders in Online Auctions," *The Computer Journal (COMPJ)*, Vol. 56, No. 5, 2013, pp. 646-663.
21. [Haiping Xu](#), Abhinay Reddyreddy\*, and Daniel F. Fitch\*, "Defending Against XML-Based Attacks Using State-Based XML Firewall," *Journal of Computers (JCP)*, Vol. 6, No. 11, November 2011, pp. 2395-2407.
22. Fei Dong\*, Sol M. Shatz, [Haiping Xu](#), and Dibyen Majumdar, "Price Comparison: A Reliable Approach to Identifying Shill Bidding in Online Auctions?" *Electronic Commerce Research and Applications (ECRA)*, Vol. 11, No. 2, March-April 2012, pp. 171-179.
23. Ryan Robidoux\*, [Haiping Xu](#), Liudong Xing, and MengChu Zhou, "Automated Modeling of Dynamic Reliability Block Diagrams Using Colored Petri Nets," *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans (TSMCA)*, Vol. 40, No. 2, March 2010, pp. 337-351.
24. Fei Dong\*, Sol M. Shatz, and [Haiping Xu](#), "Reasoning Under Uncertainty for Shill Detection in Online Auctions Using Dempster-Shafer Theory," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, Vol. 20, No. 7, November 2010, pp. 943-973.
25. Benjamin J. Ford\*, [Haiping Xu](#), Christopher K. Bates\*, and Sol M. Shatz, "Visual Specification of Layered Bidding Strategies for Autonomous Bidding Agents," *Journal of Computers (JCP)*, Vol. 5, No. 6, June 2010, pp. 940-950.
26. [Haiping Xu](#), Liudong Xing, and Ryan Robidoux\*, "DRBD: Dynamic Reliability Block Diagrams for System Reliability Modeling," *International Journal of Computers and Applications (IJCA)*, Vol. 31, No. 2, 2009, pp. 132-141.
27. Fei Dong\*, Sol M. Shatz, and [Haiping Xu](#), "Combating Online In-Auction Fraud: Clues, Techniques and Challenges," *Computer Science Review (CSR)*, Vol. 3, No. 4, November 2009, pp. 245-258.
28. [Haiping Xu](#), Mihir Ayachit\*, and Abhinay Reddyreddy\*, "Formal Modeling and Analysis of XML Firewall for Service-Oriented Systems," *International Journal of Security and Networks (IJSN)*, Vol. 3, No. 3, 2008, pp. 147-160.
29. Zhenhua\*, Yu, Yuanli Cai, and [Haiping Xu](#), "Petri Nets Semantics of  $\pi$ -calculus," *Frontiers of Electrical and Electronic Engineering in China (FEEEC)*, September 2008, Vol. 3, No. 3, pp. 290-294.
30. [Haiping Xu](#) and Yi-Tsung Cheng\*, "Model Checking Bidding Behaviors in Internet Concurrent Auctions," *International Journal of Computer Systems Science & Engineering (IJCSSE)*, July 2007, Vol. 22, No. 4, pp. 179-191.
31. Zhenhua Yu\*, Yuanli Cai, and [Haiping Xu](#), "Modeling and Analyzing Multi-Agent Systems Based on  $\pi$ -net," *Systems Engineering - Theory & Practice (SETP)*, July 2007, Vol. 27, No. 7, pp. 77-84 (in Chinese).
32. Zhenhua Yu\*, Yuanli Cai, and [Haiping Xu](#), "On Petri Nets Semantics for  $\pi$ -calculus," *Journal of Control and Decision (JCD)*, August 2007, Vol. 22, No. 8, pp. 864-868 (in Chinese).
33. [Haiping Xu](#), Xiaoqin Zhang, and Rinkesh J. Patel\*, "Developing Role-Based Open Multi-Agent Software Systems," *International Journal of Computational Intelligence Theory and Practice (IJCITP)*, June 2007, Vol. 2, No. 1, pp. 39-56.
34. Xiaoqin Zhang, [Haiping Xu](#), and Bhavesh Shrestha\*, "An Integrated Role-Based Approach for Modeling, Designing and Implementing Multi-Agent Systems," *Journal of the Brazilian Computer Society (JBACS), Special Issue on Software Engineering for Multi-Agent Systems*, July 2007, Vol. 13, No. 2, pp. 45-60.
35. Zhenhua Yu\*, Yuanli Cai, and [Haiping Xu](#), "On Modeling Approach for Dynamic Software Architecture," *Journal of Xi'an Jiaotong University (JXJU)*, February 2007, Vol. 41, No. 2, pp. 167-171 (in Chinese).
36. [Haiping Xu](#), Zhiguo Zhang, and Sol M. Shatz, "A Security Based Model for Mobile Agent Software Systems," *International Journal of Software Engineering and Knowledge Engineering (IJSEKE)*, August 2005, Vol. 15, No. 4, pp. 719-746.
37. [Haiping Xu](#) and Sol M. Shatz, "ADK: An Agent Development Kit Based on a Formal Model for Multi-Agent Systems," *Journal of Automated Software Engineering (AUSE)*, October 2003, Vol. 10, No. 4, pp. 337-365.
38. [Haiping Xu](#) and Sol M. Shatz, "A Framework for Model-Based Design of Agent-Oriented Software," *IEEE Transactions on Software Engineering (IEEE TSE)*, January 2003, Vol. 29, No. 1, pp. 15-30.

39. Ravi K. Gedela, Sol M. Shatz, and [Haiping Xu](#), "Compositional Petri Net Models of Advanced Tasking in Ada-95," *Computer Languages*, July 1999, Vol. 25, No. 2, pp. 55-87.
40. Ravi K. Gedela, Sol M. Shatz, and [Haiping Xu](#), "Formal Modeling of Synchronization Methods for Concurrent Objects in Ada 95," *ACM SIGAda Ada Letters*, 1999, Volume XIX, Issue 3, pp. 211-220.
41. [Haiping Xu](#), Xiaogang Ruan, Zengwu Chen, Shangxu Hu, and Haibo Ren, "ICTS: Hypertext and Multi-Knowledge Source Based Intelligent Chinese Tutoring System," *Journal of Chinese Information Processing*, 1992, Vol. 6, No. 2, pp. 8-16 (in Chinese).
42. Qiuping Hu, [Haiping Xu](#), Yurun Zhang, and Chunhui Zhou, "Software Design of an Expert Control System in Vacuum Distillation," *Control and Instruments in Chemical Industry*, 1992, Vol. 19, No. 4, pp. 25-29 (in Chinese).
43. Xiaogang Ruan, [Haiping Xu](#), and Zengwu Chen, "Intelligent CAI and Chinese Tutoring System," *Communications of Computation and Information*, 1991, Vol. 2, No. 7, pp. 6-14 (in Chinese).
44. [Haiping Xu](#), "Software Design of Microcomputer Based Electronic Scalars," *Process Automation Instrumentation*, 1991, Vol. 12, No. 10, pp. 13-16 (in Chinese).
45. [Haiping Xu](#), "A Novel Design of Second-Generation Expert Systems," *Communications of Computation and Information*, 1990, Vol. 1, No. 6, pp. 28-33 (in Chinese).

#### **Proceedings, Books, Book Chapters and Edited Special Issues**

46. Rui Ming\*, [Haiping Xu](#), Shannon E. Gibbs\*, Donghui Yan and Ming Shao, "A Deep Neural Network Based Approach to Building Budget-Constrained Models for Big Data Analysis," In H. R. Arabnia (Ed.), *Advances in Data Science and Information Engineering*, Springer Nature - Research Book Series, Transactions on Computational Science & Computational Intelligence, (TCSCI), 2021. Also appears in [MXG21c]
47. Josue N. Rivera\* and [Haiping Xu](#), "An Educational Tool for Exploring the Pumping Lemma Property of Regular Languages," To appear in H. R. Arabnia (Ed.), *Advances in Software Engineering, Education, and e-Learning*, Springer Nature - Research Book Series, Transactions on Computational Science & Computational Intelligence (TCSCI), Springer, July 2021, pp. 143-161. DOI: 10.1007/978-3-030-70873-3\_11. Also appears in [RX20c]
48. [Haiping Xu](#), Sotoudeh Hamed-Hagh, and Paolo Nesi (Eds.), *Proceedings of the 2017 IEEE International Conference on Smart City Innovations (IEEE SCI 2017)*, San Francisco, USA, August 4-8, 2017.
49. [Haiping Xu](#), Luca Foschini, and Jiannong Cao (Eds.), *Proceedings of the 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017)*, San Francisco, USA, April 7-9, 2017.
50. [Haiping Xu](#), (Ed.), *Featured Topic Issue: Best Papers from SEKE2015*, International Journal of Software Engineering and Knowledge Engineering (IJSEKE), Vol. 25, Nos. 9 & 10, December 2015.
51. [Haiping Xu](#), (Ed.), *Proceedings of the 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015)*, Pittsburgh, USA, July 6-8, 2015, ISBN: 1-891706-37-3.
52. [Haiping Xu](#), Jerry Gao, Yan Bai, and George Roussos (Eds.), *Feature Topical Issue on Software Engineering and Knowledge Engineering for Mobile Cloud Computing and Services*, International Journal of Software Engineering and Knowledge Engineering (IJSEKE), Vol. 24, No. 7, September 2014.
53. [Haiping Xu](#), (Ed.), *Practical Applications of Agent-Based Technology*, InTech, March 2012, ISBN: 978-953-51-0276-2.
54. M. A. Karim Sadiq, [Haiping Xu](#), Jaroslav Zendulka, Adegboyega K. Ojo (Eds.), *Proceedings of the International Conference on Software Engineering Theory and Practice (SETP-08)*, Orlando, Florida, USA, July 7-10, 2008, ISRST 2008, ISBN 978-1-60651-005-6.
55. Xiaoqin Zhang, [Haiping Xu](#), and Bhavesh Shrestha, "Building Health Care Multi-Agent Simulation System with Role-Based Modeling," In R. Paranjape and A. Sadanand (Eds.), *Multi-Agent Systems for Health Care Simulation and Modeling: Applications for System Improvement, Chapter VI*, IGI Global, August 2009, ISBN: 978-1605667720.

**Conference Publications**

1. Guancheng Zhou\*, [Haiping Xu](#), Hongkang Xu, Chenyu Li, and Donghui Yan, "A Computational Approach to Improving Fairness in K-means Clustering," In *Proceedings of the 21th International Conference on Data Science (ICDATA'25)*, Las Vegas, Nevada, USA, July 21-24, 2025.
2. Spoothi Bhat\*, [Haiping Xu](#), and Joshua Carberry\*, "Automated Medical Coding Using a Hybrid Decision Tree with Deep Learning Nodes," In *Proceedings of the 11th IEEE International Conference on Big Data Computing Service and Machine Learning Applications (IEEE BigDataService 2025)*, Tucson, Arizona, USA, July 21-24, 2025, pp. 81-88.
3. William Girard\*, [Haiping Xu](#) and Donghui Yan, "Real-Time Forecasting of Marine Visibility with Self-Adaptive Deep Learning," In *Proceedings of the IEEE 4th International Conference on Computing and Machine Intelligence (ICMI 2025)*, Mt Pleasant, Michigan, USA, April 05-06, 2025.
4. Joshua Carberry\* and [Haiping Xu](#), "A Hierarchical Fine-Grained Deep Learning Model for Automated Medical Coding," In *Proceedings of the IEEE 3rd International Conference on Computing and Machine Intelligence (ICMI 2024)*, Mt Pleasant, Michigan, USA, April 13-14, 2024, pp. 1-6. DOI: 10.1109/ICMI60790.2024.10585710
5. William Girard\*, [Haiping Xu](#) and Donghui Yan, "Real-Time Evolving Deep Learning Models for Predicting Hydropower Generation," In *Proceedings of the IEEE 3rd International Conference on Computing and Machine Intelligence (ICMI 2024)*, Mt Pleasant, Michigan, USA, April 13-14, 2024, pp. 1-6. DOI: 10.1109/ICMI60790.2024.10585701
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8. Alvin Thamrin\* and [Haiping Xu](#), "Hierarchical Cloud-Based Consortium Blockchains for Healthcare Data Storage," In *2021 IEEE 21st International Conference on Software Quality, Reliability and Security Companion (QRS-C)*, IEEE BSC 2021, Hainan Island, China, December 6-10, 2021, pp. 644-651.
9. Alvin Thamrin\* and [Haiping Xu](#), "Cloud-Based Blockchains for Secure and Reliable Big Data Storage Service in Healthcare Systems," In *Proceedings of the 15th IEEE International Conference on Service-Oriented System Engineering (IEEE SOSE 2021)*, Oxford Brookes University, UK, August 23-26, 2021, pp. 81-89.
10. Rui Ming\*, [Haiping Xu](#), Shannon E. Gibbs\*, Donghui Yan and Ming Shao, "A Deep Neural Network Based Approach to Building Budget-Constrained Models for Big Data Analysis," In *Proceedings of the 17th International Conference on Data Science (ICDATA'21)*, Las Vegas, Nevada, USA, July 26-29, 2021, pp. 1-8.
11. Rui Ming\* and [Haiping Xu](#), "Timely Publication of Transaction Records in a Private Blockchain," In *2020 IEEE 20th International Conference on Software Quality, Reliability and Security Companion (QRS-C)*, The IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2020), Macau, China, December 11-14, 2020, pp. 116-123.
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23. Jean Rahme and [Haiping Xu](#), "Reliability-Based Software Rejuvenation Scheduling for Cloud-Based Systems," In *Proceedings of the 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015)*, Pittsburgh, USA, July 6-8, 2015, pp. 298-303.
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43. Yi-Tsung Cheng and [Haiping Xu](#), "A Formal Approach to Detecting Shilling Behaviors in Concurrent Online Auctions," In *Proceedings of the 8th International Conference on Enterprise Information Systems (ICEIS 2006)*, May 23-27, 2006, Paphos, Cyprus.
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#### **Research Posters/Abstracts**

52. Snehashish Srivastava, [Haiping Xu](#), and Donghui Yan, "Prediction of Storm Formation Through Anomaly Detection with Autoencoder Networks," *Research Poster*, 2025 Marine Undersea Technology Research Program Showcase (MUST Days 2025), UMass Dartmouth, MA, USA, July 21-22, 2025.
53. William Girard\*, [Haiping Xu](#), and Donghui Yan, "Self-Learning AI for Predicting Marine Visibility in Real Time," *Research Poster*, 2025 Sigma Xi Research Exhibition (Sigma Xi 2025), UMass Dartmouth, MA, USA, April 16-17, 2025.
54. William Girard, [Haiping Xu](#), and Donghui Yan, "Real-Time Evolving Deep Learning Models for Predicting Hydropower Generation," *Research Poster*, Honors Convocation Poster Session, UMass Dartmouth, MA, USA, April 23, 2025.
55. Nathan Costa\* and [Haiping Xu](#), "Unsupervised Machine Learning for Detecting Anomalous Movie Reviews," *Research Poster*, Honors Convocation Poster Session, UMass Dartmouth, MA, USA, April 24, 2024.
56. Joshua Carberry\* and [Haiping Xu](#), "Automated Medical Coding Using GPT-Enhanced Text Mining," *Research Poster*, 2024 Sigma Xi Research Exhibition (Sigma Xi 2024), UMass Dartmouth, MA, USA, April 17-18, 2024.
57. Joshua Carberry\* and [Haiping Xu](#), "Explainable Automated Medical Coding with Ontology-Based Text Mining and Hierarchical Classification," *Research Poster*, Industry Day, UMass Dartmouth, MA, USA, October 18, 2023.
58. Joshua Carberry\* and [Haiping Xu](#), "Ontology-Based Text Mining for Explainable Automated Medical Coding," *Research Poster*, 2023 Sigma Xi Research Exhibition (SigmaXi 2023), UMass Dartmouth, MA, USA, April 12-13, 2023.
59. Raymond Liu, Jurui Zhang, [Haiping Xu](#), and Richard de Groof\*, "An Empirical Study of the Impact of Online Community Engagement, Motivation, and Customer Experience on Consumer Brand Advocacy," *Research Abstract*, The Atlantic Marketing Association Conference, New Orleans, LA, USA, September 26-29, 2019.
60. Raymond Liu, Jurui Zhang, [Haiping Xu](#), and Richard de Groof\*, "An Empirical Study of Consumer Brand Advocacy in the Digital Community Environment," *Research Abstract*, 7th Annual International Colloquium on Branding, Athens, Greece, July 29-31 & August 1, 2019.

61. Richard de Groof\*, [Haiping Xu](#), Jurui Zhang and Raymond Liu, "A Parallel LDA-Based Approach to Identifying Trends of Cultural Products in the Music Industry," *Research Poster*, 24th Annual Sigma Xi Research Exhibition (SigmaXi 2018), UMass Dartmouth, MA, USA, April 18-19, 2018.
62. Daniel Noyes\*, Hong Liu, Paul Fortier, and [Haiping Xu](#), "Security Improvement of USB Technology," *Cyber Security Posters*, 2017 IEEE International Symposium on Technologies for Homeland Security (IEEE HST 2017), Waltham, MA, USA, April 25-26, 2017.
63. Jean Rahme\* and [Haiping Xu](#), "Formal Generation of Reliability Functions for Cloud-Based Two-Hot Spare Gates," *Research Poster*, 22nd Annual Sigma Xi Research Exhibition (SigmaXi 2016), UMass Dartmouth, MA, USA, April 20-21, 2016.
64. Monika Shrestha\*, Liudong Xing, and [Haiping Xu](#), "Reliability Analysis of Dynamic Systems with Sequence-Dependent Failures," *Research Poster*, 16th Annual Sigma Xi Research Exhibition (SigmaXi 2010), UMass Dartmouth, MA, USA, April 21-22, 2010.

#### **Paper Presented and Seminar Talks**

1. Title: *Automated Medical Coding Using a Hybrid Decision Tree with Deep Learning Nodes*, 11th IEEE International Conference on Big Data Computing Service and Machine Learning Applications (IEEE BigDataService 2025), Tucson, Arizona, USA, July 21-24, 2025.
2. Title: *A Deep Neural Network Based Approach to Building Budget-Constrained Models for Big Data Analysis*, 17th International Conference on Data Science (ICDATA'21), Las Vegas, Nevada, USA, July 26-29, 2021.
3. Title: *Timely Publication of Transaction Records in a Private Blockchain*, IEEE International Workshop on Blockchain and Smart Contracts (BSC 2020), Macau, China, December 12, 2020.
4. Title: *Smart Real Estate Assessments Using Structured Deep Neural Networks*, IEEE International Conference on Smart City Innovations (IEEE SCI 2017), San Francisco, CA, USA, August 5, 2017.
5. Title: *An Efficient Double Auction Mechanism for On-Demand Transport Services in Cloud-Based Mobile Commerce*, IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017), San Francisco, CA, USA, April 7, 2017.
6. Title: *SLTM: A Sentence Level Topic Model for Analysis of Online Reviews*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2016), San Francisco, CA, USA, July 2, 2016.
7. Title: *A Reliable and Secure Cloud Storage Schema Using Multiple Service Providers*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2015), Pittsburgh, USA, July 6, 2015.
8. Invited Talk: *Future Research Directions of Software Engineering and Knowledge Engineering*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2014), Vancouver, Canada, July 2, 2014.
9. Title: *Two-Level Smart Search Engine Using Ontology-Based Semantic Reasoning*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2014), Vancouver, Canada, July 2, 2014.
10. Title: *A Formal Cost-Effectiveness Analysis Model for Product Evaluation in E-Commerce*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2013), Boston, MA, USA, June 2013.
11. Title: *A Petri Net Model for Secure and Fault-Tolerant Cloud-Based Information Storage*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2012), San Francisco Bay, CA, USA, July 2012.
12. Title: *A Real-Time Reliability Model for Ontology-Based Dynamic Web Service Composition*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2011), Miami, Florida, USA, July 2011.
13. Title: *Identifying Suspicious Bidders Utilizing Hierarchical Clustering and Decision Trees*, International Conference on Artificial Intelligence (ICAI'10), Las Vegas, Nevada, USA, July 2010.
14. Title: *A Multi-State Bayesian Network for Skill Verification in Online Auctions*, International Conference on Software Engineering and Knowledge Engineering (SEKE 2010), Redwood City, San Francisco Bay, California, USA, July 2010.

15. Title: *Trustworthy Agent-Based Online Auction Systems*, Computer Science Seminar Series, Computer and Information Science Department, University of Massachusetts Dartmouth, November 2009.
16. Title: *Real-Time Model Checking for Shill Detection in Live Online Auctions*, International Conference on Software Engineering Research and Practice (SERP'09), Las Vegas, Nevada, USA, July 2009.
17. Title: *Model-Based Specification of Complex Bidding Strategies in Agent-Based Online Auctions*, International Conference on Information Technology: New Generations (ITNG 2009), Las Vegas, Nevada, USA, April 2009.
18. Title: *SD-ROC: Service Discovery for Reliable Operations Center*, Marine Corps Project Meeting, ATMC, Fall River, MA, USA, October 2008.
19. Title: *Securing Service-Oriented Systems Using State-Based XML Firewall*, International Conference on Software Engineering and Knowledge Engineering (SEKE'2008), Redwood City, San Francisco Bay, California, USA, July 2008.
20. Title: *Ontology-Based Dynamic Service Discovery for Fault-Tolerant Service-Oriented Systems*, Marine Corps Project Meeting, ATMC, Fall River, MA, USA, June 2008.
21. Title: *A Framework for Agent-Based Trust Management in Online Auctions*, International Conference on Information Technology: New Generations (ITNG 2008), Las Vegas, Nevada, USA, April 2008.
22. Title: *Agent-Based Trust Management for Trust Re-Evaluation in Online Auctions*, NSF Project Meeting, Department of Computer Science, University of Illinois at Chicago, January 2008.
23. Title: *DRBD: Dynamic Reliability Block Diagrams for System Reliability Modeling*, International Conference on Software Engineering and Applications (SEA 2007), Cambridge, Massachusetts, USA, November 2007.
24. Title: *Trustworthy Agent-Based Online Auction Systems*, Computer Science Industrial Advisory Committee (CSIAC) Meeting, University of Massachusetts Dartmouth, USA, November 2007.
25. Title: *Real-Time Trust Management in Agent Based Online Auction Systems*, International Conference on Software Engineering and Knowledge Engineering (SEKE'07), Boston, USA, July 2007,
26. Title: *A Petri Net Based XML Firewall Security Model for Web Services Invocation*, International Conference on Communication, Network, and Information Security (CNIS 2006), MIT, Cambridge, Massachusetts, USA, October 2006.
27. Title: *A Methodology for Role-Based Modeling of Open Multi-Agent Software Systems*, Computer Science Industrial Advisory Committee (CSIAC) Meeting, University of Massachusetts Dartmouth, USA, November 2005.
28. Title: *Towards a Role-Based Agent Development Environment for Open Multi-Agent Software Systems*, CIS Seminars, Computer and Information Science Department, University of Massachusetts Dartmouth, October 2005.
29. Title: *A Methodology for Role-Based Modeling of Multi-Agent Software Systems*, International Conference on Enterprise Information Systems (ICEIS 2005), Miami, Florida, USA, May 2005.
30. Title: *A Security Based Model for Mobile Agent Software Systems*, CIS Seminars, Computer and Information Science Department, University of Massachusetts Dartmouth, April 2004.
31. Title: *A Model-Based Approach for Development of Multi-Agent Software Systems*, Computer Science Colloquium, Computer Science Department, University of Massachusetts Boston, December 2003.
32. Title: *A Model-Based Approach for Development of Multi-Agent Software Systems*, Computer Science Colloquium, School of Electrical Engineering and Computer Science, Oregon State University, May 2003.
33. Title: *A Model-Based Approach for Development of Multi-Agent Software Systems*, Computer Science Colloquium, Department of Computer Science, State University of New York, Binghamton, March 2003.
34. Title: *A Model-Based Approach for Development of Multi-Agent Software Systems*, Computer Science Colloquium, Department of Computer Science, Iowa State University, March 2003.
35. Title: *An Agent-Based Petri Net Model with Application to Seller/Buyer Design in Electronic Commerce*, The Fifth International Symposium on Autonomous Decentralized Systems (ISADS 2001), Dallas, Texas, USA, March 2001.

36. Title: *Extending G-Nets to Support Inheritance Modeling in Concurrent Object-Oriented Design*, IEEE International Conference on Systems, Man, and Cybernetics (SMC 2000), Nashville, Tennessee, USA, October 2000.
37. Title: *Formal Modeling of Synchronization Methods for Concurrent Objects in Ada 95*, The ACM Annual International Conference on Ada (SIGAda'99), Redondo Beach, CA, USA, October 1999.

## I. Recent Professional Activities

### Conference Chair/Co-Chair

1. **Technical Program Committee Chair:** The 7th International Artificial Intelligence and Blockchain Conference (AIBC 2026)
2. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2025)
3. **Technical Program Committee Chair:** The 6th International Artificial Intelligence and Blockchain Conference (AIBC 2025)
4. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2024)
5. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2023)
6. **Technical Program Committee Chair:** The 5th International Artificial Intelligence and Blockchain Conference (AIBC 2024)
7. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2022)
8. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2021)
9. **Program Chair:** IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2020)
10. **General Chair:** The 2018 IEEE Conference on Smart City Innovations (IEEE SCI 2018)
11. **General Chair:** 6th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2018)
12. **Program Chair:** The 2017 IEEE Conference on Smart City Innovations (IEEE SCI 2017)
13. **Program Chair:** 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017)
14. **General Chair:** 28th International Conference on Software Engineering and Knowledge Engineering (SEKE 2016).
15. **Program Chair:** 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015).
16. Program Co-Chair: 26th International Conference on Software Engineering and Knowledge Engineering (SEKE 2014).
17. Program Co-Chair: 25th International Conference on Software Engineering and Knowledge Engineering (SEKE 2013).
18. Publicity Chair (US): IEEE International Symposium on Mobile Cloud, Computing and Service Engineering (MobileCloud 2013).
19. Publicity Chair (US): 7th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2013).
20. Program Co-Chair: 18th International Conference on Distributed Multimedia Systems (DMS 2012).
21. Publicity Co-Chair: 24th International Conference on Software Engineering and Knowledge Engineering (SEKE 2012).
22. Special Session Co-Chair: Software Assurance at the 26th International Conference on Software Engineering and Knowledge Engineering (SEKE 2014).
23. Special Session Co-Chair: Petri Nets for Software Engineering and Knowledge Engineering at the 24th International Conference on Software Engineering and Knowledge Engineering (SEKE 2012).
24. Track Co-Chair: Artificial Intelligence and Software Engineering (AISE), 8th International Conference on Bio-inspired Information and Communications Technologies (BICT 2014).
25. Track Co-Chair: Circuits and System Design, 7th International Conference on Information Technology: New Generations (ITNG 2010).
26. Program Co-Chair: International Conference on Software Engineering Theory and Practice (SETP-09)

27. Track Co-Chair: Hardware-Software Codesign, 6th International Conference on Information Technology: New Generations (ITNG 2009).
28. Program Co-Chair: International Conference on Software Engineering Theory and Practice (SETP-08)

#### **Track Committee (E-Commerce)**

1. 7th International Conference on Information Technology: New Generations (ITNG 2010)
2. 6th International Conference on Information Technology: New Generations (ITNG 2009)
3. 5th International Conference on Information Technology: New Generations (ITNG 2008)

#### **Session Chair**

1. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2022)
2. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2021)
3. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2020)
4. The 2017 IEEE Conference on Smart City Innovations (IEEE SCI 2017)
5. IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017)
6. International Conference on Software Engineering and Knowledge Engineering (SEKE 2016)
7. International Conference on Software Engineering and Knowledge Engineering (SEKE 2015)
8. International Conference on Software Engineering and Knowledge Engineering (SEKE 2014)
9. International Conference on Software Engineering and Knowledge Engineering (SEKE 2013)
10. International Conference on Software Engineering and Knowledge Engineering (SEKE 2012)
11. International Conference on Software Engineering and Knowledge Engineering (SEKE 2011)
12. International Conference on Software Engineering and Knowledge Engineering (SEKE 2010)
13. International Conference on Software Engineering Research and Practice (SERP'09)
14. International Conference on Information Technology: New Generations (ITNG 2009)
15. International Conference on Information Technology: New Generations (ITNG 2008)
16. International Conference on Software Engineering and Applications (SEA 2007)
17. International Conference on Communication, Network, and Information Security (CNIS 2006).

#### **International Program Committee**

1. 26th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2026)
2. 38th International Conference on Software Engineering and Knowledge Engineering (SEKE 2026)
3. 14th IEEE International Conference on Intelligent Mobile Computing (IEEE IMC 2026)
4. 25th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2025)
5. 37th International Conference on Software Engineering and Knowledge Engineering (SEKE 2025)
6. 24th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2024)
7. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2024)
8. 36th International Conference on Software Engineering and Knowledge Engineering (SEKE 2024)
9. 25th IEEE International Conference on Information Reuse and Integration (IEEE IRI 2024)
10. 5th International Artificial Intelligence and Blockchain Conference (AIBC 2024)
11. 23rd IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2023)
12. 11th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2023)
13. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2023)
14. 35th International Conference on Software Engineering & Knowledge Engineering (SEKE 2023)
15. IEEE 24th International Conference on Information Reuse and Integration (IRI 2023)
16. 4th International Artificial Intelligence and Blockchain Conference (AIBC 2023)
17. 43rd IEEE International Conference on Distributed Computing Systems (ICDCS 2023)
18. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2022)
19. 22nd IEEE International Conference on Software Quality, Reliability, and Security (QRS 2022)

20. 10th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2022)
21. IEEE 23rd International Conference on Information Reuse and Integration for Data Science (IRI 2022)
22. 42nd IEEE International Conference on Distributed Computing Systems (ICDCS 2022)
23. 34th International Conference on Software Engineering & Knowledge Engineering (SEKE 2022)
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26. 21st IEEE International Conference on Software Quality, Reliability, and Security (QRS 2021)
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37. 7th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2019)
38. 30th International Conference on Software Engineering and Knowledge Engineering (SEKE 2018)
39. The 2nd IEEE International Conference on Smart City Innovations (IEEE SCI 2018)
40. 6th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2018)
41. 14th IEEE Conference on Advanced and Trusted Computing (IEEE ATC 2017)
42. The 2017 IEEE Conference on Smart City Innovations (IEEE SCI 2017)
43. 11th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2017)
44. 29th International Conference on Software Engineering and Knowledge Engineering (SEKE 2017)
45. International Workshop on Security, Privacy, and Digital Forensics of Mobile Cloud (SeMoCloud 2017)
46. 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017)
47. 14th IASTED International Conference on Software Engineering (SE 2016)
48. 10th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2016)
49. 28th International Conference on Software Engineering and Knowledge Engineering (SEKE 2016)
50. 2nd International Conference on Information Science and Security (ICISS 2015)
51. 9th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2015)
52. Workshop A2HC 2015, International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015)
53. 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015)
54. 8th International Conference on Bio-inspired Information and Communications Technologies (BICT 2014)
55. 26th International Conference on Software Engineering and Knowledge Engineering (SEKE 2014)
56. IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2014)
57. Workshop MASH 14, 13th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2014)
58. International Conference on Parallel and Distributed Computing and Networks (PDCN 2014)
59. 8th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2014)
60. International Conference on Information Science and Cloud Computing (ISCC 2013)

61. 2nd International Conference on Model-Driven Engineering and Software Development (MODELSWARD 2014)
62. IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2013)
63. 3rd International Conference on Logistics, Informatics and Service Science (LISS 2013)
64. 15th International Conference on Enterprise Information Systems (ICEIS 2013)
65. 28th Annual ACM Symposium on Applied Computing, SE track (SAC 2013)
66. 8th International Conference on Software Paradigm Trends (ICSOFT-PT 2013)
67. 25th International Conference on Software Engineering and Knowledge Engineering (SEKE 2013)
68. IEEE International Symp. on Mobile Cloud, Computing and Service Engineering (MobileCloud 2013)
69. 11th International Conference on Parallel and Distributed Computing and Networks (PDCN 2013)
70. 7th IEEE International Symposium on Service-Oriented System Engineering (SOSE 2013)
71. 11th International Conference on Software Engineering (SE 2012)
72. AC 2012, International Conference on Collaborative Technologies and Systems (CTS 2012)
73. 7th International Conference on Software Paradigm Trends (ICSOFT 2012)
74. 24th International Conference on Software Engineering and Knowledge Engineering (SEKE 2012)
75. 14th International Conference on Enterprise Information Systems (ICEIS 2012)
76. 6th IEEE International Symposium on Service-Oriented System Engineering (SOSE 2011)
77. International Workshop on Service-Oriented Computing and Multi-Agent Systems (SOC-MAS 2011)
78. 15th International Conference on Software Engineering and Applications (SEA 2011)
79. 6th International Conference on Software and Data Technologies (ICSOFT 2011)
80. International Conference on Information Science and Applications (ICISA 2011)
81. AC 2011, International Conference on Collaborative Technologies and Systems (CTS 2011)
82. 1st International Conference on Logistics, Informatics and Service Science (LISS 2011)
83. 23rd International Conference on Software Engineering and Knowledge Engineering (SEKE 2011)
84. 13th International Conference on Enterprise Information Systems (ICEIS 2011)
85. 14th International Conference on Software Engineering and Applications (SEA 2010)
86. 10th International Conference on Parallel and Distributed Computing and Networks (PDCN 2011)
87. IEEE International Conference on Systems, Man, and Cybernetics (SMC 2010)
88. 5th International Conference on Software and Data Technologies (ICSOFT 2010)
89. International Conference on Software Engineering Research and Practice (SERP'10)
90. International Conference on Artificial Intelligence (ICAI'10)
91. 22nd International Conference on Software Engineering and Knowledge Engineering (SEKE 2010)
92. 12th International Conference on Enterprise Information Systems (ICEIS 2010)
93. AC 2010, International Symposium on Collaborative Technologies and Systems (CTS 2010)
94. 9th International Conference on Parallel and Distributed Computing and Networks (PDCN 2010)
95. 4th International Conference on Frontier of Computer Science and Technology (FCST 2009)
96. 4th International Conference on Software and Data Technologies (ICSOFT 2009)
97. 13th International Conference on Software Engineering and Applications (SEA 2009)
98. 21st International Conference on Software Engineering and Knowledge Engineering (SEKE'2009)
99. International Conference on Software Engineering Research and Practice (SERP'09)
100. RBC 2009, International Symposium on Collaborative Technologies and Systems (CTS 2009)
101. 11th International Conference on Enterprise Information Systems (ICEIS 2009)
102. International Conference on Parallel and Distributed Computing and Networks (PDCN 2009)
103. International Conference on Software Engineering Theory and Practice (SETP-09)
104. 12th International Conference on Software Engineering and Applications (SEA 2008)
105. 10th International Conference on Enterprise Information Systems (ICEIS 2008)
106. International Conference on Software and Data Technologies (ICSOFT 2008)
107. International Conference on Enterprise Information Systems and Web Technologies (EISWT-08)
108. International Conference on Software Engineering Theory and Practice (SETP-08)
109. 11th International Conference on Software Engineering and Applications (SEA 2007)
110. International Conference on Software and Data Technologies (ICSOFT 2007)

111. International Conference on Parallel and Distributed Computing and Systems (PDCS 2007)
112. 9th International Conference on Enterprise Information Systems (ICEIS 2007)
113. International Conference on Enterprise Information Systems and Web Technologies (EISWT-07)
114. International Conference on Software and Data Technologies (ICSOFT 2006)
115. 10th International Conference on Software Engineering and Applications (SEA 2006)
116. International Conference on Communication Systems and Application (CSA 2006)
117. International Conference on Networks and Communication Systems (NCS 2006)
118. 8th International Conference on Enterprise Information Systems (ICEIS 2006)
119. International Conference on Software Engineering Research and Practice (SERP'05)
120. International Conference on Internet Computing (ICOMP'05)
121. 7th International Conference on Enterprise Information Systems (ICEIS 2005)

**Journal Editorial Boards:**

1. IEEE Transactions on Cloud Computing (TCC), 2014 ~ 2022
2. International Journal of Software Engineering and Knowledge Engineering (IJSEKE), 2014 ~ Present
3. Journal of Engineering Research and Sciences (JENRS), 2024 ~ Present
4. Advances in Artificial Intelligence and Technology (AAIAT), 2024 ~ Present
5. Journal of Computers (JCP), 2009 ~2016
6. International Journal of Computers and Applications (IJCA), 2009 ~ 2017
7. The Open Software Engineering Journal (TOSEJ), 2008 ~ 2015
8. Journal on Mobile Communications, Networking and Applications (JMobile), 2013 ~ 2015
9. The Scientific World Journal (Computer Science), 2013 ~ 2015
10. Guest Editor: Special Issue on Software Engineering & Knowledge Engineering for Mobile Cloud Computing & Services, International Journal of Software Engineering and Knowledge Engineering (IJSEKE), 2013 ~ 2014.

**Technical Committee on Software Engineering:** The International Association of Science and Technology for Development (IASTED), Term 2005 ~ 2008.

**Book Editor:** *Practical Applications of Agent-Based Technology*, InTech, March 2012, ISBN: 978-953-51-0276-2. *Proceedings of the International Conference on Software Engineering Theory and Practice (SETP-08)*, Orlando, Florida, USA, July 7-10, 2008, ISRST 2008, ISBN 978-1-60651-005-6.

**Referee for Book Proposals:** Springer US, IGI Global, Routledge, Wiley

**Referee for Journals**

1. IEEE Transactions on Cloud Computing (IEEE TCC)
2. IEEE Transactions on Software Engineering (IEEE TSE)
3. IEEE Transactions on Parallel and Distributed Systems (IEEE TPDS)
4. IEEE Transactions on Services Computing (IEEE TSC)
5. IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE)
6. IEEE Transactions on Reliability (IEEE TR)
7. IEEE Transactions on Systems, Man and Cybernetics, Part A (IEEE TSMCA)
8. IEEE Transactions on Systems, Man and Cybernetics, Part B (IEEE TSMCB)
9. IEEE Transactions on Systems, Man and Cybernetics, Part C (IEEE TSMCC)
10. IEEE Transactions on Multimedia (IEEE TMM)
11. IEEE Transactions on Industrial Informatics (IEEE TII)
12. IEEE Transactions on Dependable and Secure Computing (TDSC)
13. IEEE Access: The Multidisciplinary Open Access Journal
14. IEEE Design & Test (IEEE DT)
15. ACM Transactions on Embedded Computing Systems (ACM TECS)
16. Transactions on Computational Science (TCS)
17. International Journal of Software Engineering & Knowledge Engineering (IJSEKE)

18. Software: Practice and Experience (SPE)
19. Journal of Software Testing, Verification and Reliability (STVR)
20. Data & Knowledge Engineering Journal (DKE)
21. Science of Computer Programming (SCP)
22. International Journal of Security and Networks (IJSN)
23. IEEE Intelligent Systems (IS)
24. Journal of Supercomputing (SUPE)
25. International Journal of Modeling and Simulation (IJMS)
26. International Journal of Computers and Applications (IJCA)
27. Computers and Electrical Engineering (COMPELECENG)
28. Journal of Computers (JCP)
29. Journal of Organizational Computing and Electronic Commerce (JOCEC)
30. Electronic Commerce Research Journal (ECRJ)
31. Information Security Journal: A Global Perspective (ISJGP)
32. Security and Communication Networks (SCN)
33. The Open Software Engineering Journal (TOSEJ)
34. Frontiers of Information Technology & Electronic Engineering (FITEE)
35. Computers in Biology and Medicine (CBM)
36. Journal of Zhejiang University Science C - Computers & Electronics (ZUSC)
37. Journal of Engineering Research and Sciences (JENRS)
38. Computers in Human Behavior (CHB)

#### **Referee for Conferences**

1. 26th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2026)
2. 38th International Conference on Software Engineering and Knowledge Engineering (SEKE 2026)
3. 14th IEEE International Conference on Intelligent Mobile Computing (IEEE IMC 2026)
4. 25th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2025)
5. 37th International Conference on Software Engineering and Knowledge Engineering (SEKE 2025)
6. 24th IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2024)
7. IEEE International Workshop on Blockchain and Smart Contracts (IEEE BSC 2024)
8. 36th International Conference on Software Engineering and Knowledge Engineering (SEKE 2024)
9. 25th IEEE International Conference on Information Reuse and Integration (IEEE IRI 2024)
10. 5th International Artificial Intelligence and Blockchain Conference (AIBC 2024)
11. 23rd IEEE International Conference on Software Quality, Reliability, and Security (IEEE QRS 2023)
12. 11th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2023)
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14. 35th International Conference on Software Engineering & Knowledge Engineering (SEKE 2023)
15. 4th International Artificial Intelligence and Blockchain Conference (AIBC 2023)
16. 43rd IEEE International Conference on Distributed Computing Systems (ICDCS 2023)
17. 35th International Conference on Software Engineering & Knowledge Engineering (SEKE 2023)
18. 4th International Artificial Intelligence and Blockchain Conference (AIBC 2023)
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45. International Workshop on Security, Privacy, and Digital Forensics of Mobile Cloud (SeMoCloud 2017)
46. 5th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering (IEEE Mobile Cloud 2017)
47. 14th IASTED International Conference on Software Engineering (SE 2016)
48. 10th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2016)
49. 28th International Conference on Software Engineering and Knowledge Engineering (SEKE 2016)
50. 13th International Workshop on Discrete Event Systems (DES 2016)
51. 2nd International Conference on Information Science and Security (ICISS 2015)
52. 9th IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2015)
53. Workshop A2HC 2015, 13th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015)
54. 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015)
55. 8th International Conf. on Bio-inspired Information and Communications Technologies (BICT 2014)
56. 2014 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2014)
57. IEEE International Symposium on Service-Oriented System Engineering (IEEE SOSE 2014)
58. 26th International Conference on Software Engineering and Knowledge Engineering (SEKE 2014)
59. Workshop MASH 14, 13th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2014)
60. International Conference on Parallel and Distributed Computing and Networks (PDCN 2014)
61. 2nd International Conference on Model-Driven Engineering and Software Development (MODELSWARD 2014)
62. International Conference on Information Science and Cloud Computing (ISCC 2013)
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64. 3rd International Conference on Logistics, Informatics and Service Science (LISS 2013)
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69. IEEE International Symp. on Mobile Cloud, Computing and Service Engineering (MobileCloud 2013)

70. 11th International Conference on Parallel and Distributed Computing and Networks (PDCN 2013)
71. 7th IEEE International Symposium on Service-Oriented System Engineering (SOSE 2013)
72. AC 2012, International Conference on Collaborative Technologies and Systems (CTS 2012)
73. 24th International Conference on Software Engineering and Knowledge Engineering (SEKE 2012)
74. 7th International Conference on Software Paradigm Trends (ICSOFT 2012)
75. 11th International Conference on Software Engineering (SE 2012)
76. 14th International Conference on Enterprise Information Systems (ICEIS 2012)
77. 4th International Workshop on WSN: Architectures, Deployments and Trends (WSN-ADT 2012)
78. 15th International Conference on Software Engineering and Applications (SEA 2011)
79. 6th IEEE International Symposium on Service-Oriented System Engineering (SOSE 2011)
80. 23rd International Conference on Software Engineering and Knowledge Engineering (SEKE 2011)
81. 13th International Conference on Enterprise Information Systems (ICEIS 2011)
82. 6th International Conference on Software and Data Technologies (ICSOFT 2011)
83. 1st International Conference on Logistics, Informatics and Service Science (LISS 2011)
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85. International Conference on Information Science and Applications (ICISA 2011)
86. 10th International Conference on Parallel and Distributed Computing and Networks (PDCN 2011)
87. 14th International Conference on Software Engineering and Applications (SEA 2010)
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89. 22nd International Conference on Software Engineering and Knowledge Engineering (SEKE 2010)
90. 12th International Conference on Enterprise Information Systems (ICEIS 2010)
91. 5th International Conference on Software and Data Technologies (ICSOFT 2010)
92. International Symposium on Collaborative Technologies and Systems (CTS 2010)
93. 7th International Conference on Information Technology: New Generations (ITNG 2010)
94. 9th International Conference on Parallel and Distributed Computing and Networks (PDCN 2010)
95. 13th International Conference on Software Engineering and Applications (SEA 2009)
96. 4th International Conference on Frontier of Computer Science and Technology (FCST 2009)
97. IEEE International Conference on Systems, Man, and Cybernetics (SMC 2009)
98. 4th International Conference on Software and Data Technologies (ICSOFT 2009)
99. 21st International Conference on Software Engineering and Knowledge Engineering (SEKE'2009)
100. International Symposium on Collaborative Technologies and Systems (CTS 2009)
101. 11th International Conference on Enterprise Information Systems (ICEIS 2009)
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104. 12th International Conference on Software Engineering and Applications (SEA 2008)
105. International Conference on Software and Data Technologies (ICSOFT 2008)
106. 10th International Conference on Enterprise Information Systems (ICEIS 2008)
107. 5th International Conference on Information Technology: New Generations (ITNG 2008)
108. 5th Asian Conference on Communication Systems and Networks (AsiaCSN 2008)
109. 4th International Conference on Advances in Computer Science and Technology (ACST 2008)
110. International Conference on Enterprise Information Systems and Web Technologies (EISWT-08)
111. International Conference on Software Engineering (SE 2008)
112. 11th International Conference on Software Engineering and Applications (SEA 2007)
113. 19th International Conference on Parallel and Distributed Computing and Systems (PDCS 2007)
114. 9th International Conference on Enterprise Information Systems (ICEIS 2007)
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116. International Conference on Software Engineering Research and Practice (SERP 2007)
117. International Conference on Enterprise Information Systems and Web Technologies (EISWT-07)
118. 3rd International Conference on Advances in Computer Science and Technology (ACST 2007)
119. 10th International Conference on Software Engineering and Applications (SEA 2006)
120. International Conference on Software and Data Technologies (ICSOFT 2006)

121. International Conference on Communication Systems and Application (CSA 2006)
122. European Internet and Multimedia Systems and Applications (EuroIMSA 2006)
123. International Conference on Networks and Communication Systems (NCS 2006)
124. 8th International Conference on Enterprise Information Systems (ICEIS 2006)
125. 7th International Conference on Enterprise Information Systems (ICEIS 2005)
126. 23rd IEEE International Conference on Distributed Computing Systems (ICDCS 2003)
127. 21st International Conference on Distributed Computing Systems (ICDCS-21)
128. 24th International Conference on Application and Theory of Petri Nets (ICATPN 2002)