Profile

Min Jin

Professor, Ph.D. Supervisor

College of Computer Science and Electronic Engineering
Hunan University
Changsha, Hunan Province, China 410082

Office: Software Bldg.
E-Mail: jinmin@hnu.edu.cn

Education

- B.S. in School of Information Science and Engineering, Central South University of Technology, China,1995.
- M.S. in School of Information Science and Engineering, Central South University, China, 1997.
- Ph.D. in School of Information Science and Engineering, Central South University, China, 2000.

Working Experiences

- Engineer (1998-1999)
  Shenzhen Research Center of Automation Engineering, China.
  Cooperate with Dashi Automation Engineering Co. LTD, developing building automation products based on LonWorks Field-Bus.
- Senior Engineer and Project Manager (2000-2004)
  Yantai Dongfang Electronic Information Industry Co. LTD, China.
  Lead the analysis, design and development of two products called Embedded Web Server for DF3600 Substation Automation System and DF3800 Embedded DCS, and one project that is Automation Process System of Regenerated Waste Water for NANJING Second Thermoelectricity Factory.
- Visiting Scholar (2009-2010)
  School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, USA.
- Professor and Associate Professor (2004-Current)
  College of Computer Science and Electronic Engineering, Hunan University, Changsha, China.

Research Interests

- Embedded System and Artificial Intelligence
- Big data and Industrie 4.0
- Software Process

R&D Projects

Principal Investigator:

1. National 863 Key Program of China: *Remote Monitoring and Fault-Diagnosis Technology Based on Data Mining and Software Simulation for Concrete Pump Trucks*,500,000 RMB, 2009-2010

2. National Natural Science Foundation of China: *Study on Framework and Core Methods of Edge Blur Theory for Bus Load Forecasting*, 790,000 RMB, 2014-2017

3. Key Project of National Scientific and Technological Achievement Transformation of China: *Research and Development of General Configuration Platform and Security Technology for Controller*, 2,400,000 RMB, 2014-2018

4. Military Technology Proliferation Program of China: *Research on*** Smart Instrument ****, 500,000 RMB, 2011-2012

5. Electronic Information Industry Development Fund of the Ministry of Industry and Information Technology, China: *Research on Key Technologies of Operation Monitoring and Remote Communication for Vehicular Information Terminal*，600,000 RMB, 2013-2016

6. Natural Science Foundation Program of Hunan Province, China: *Research on Method of Synthetic Evaluation, Selection and Optimization for the Software Process Model*, 2008-2010

7. Industrial Project from South Locomotive & Rolling Stock Industry Co. LTD of China: *Locomotive Control Platform based on VxWorks and ISaGRAF*, 2005-2006

8. Industrial Project from Yantai Dongfang Electronic Information Industry Co. LTD of China: *DF3800 Embedded DCS (Distributed Control System)*, 2002-2004

9. Industrial Project from Nanjing Second Power Plant: *Automatic Control System of Regeneration Wastewater in Power Plant*, 2004

10. Industrial Project from Yantai Dongfang Electronic Information Industry Co. LTD of China: *Software Project Management and Knowledge Engineering Construction*, 2002

11. Industrial Project from Yantai Dongfang Electronic Information Industry Co. LTD of China: *Embedded Web Server for DF3600 Substation Automation System*, 2000-2001

12. Industrial Project from Dashi Automation Engineering Co. LTD of China: *Networked control system based on LonWorks Field-bus*, 1999

13. Laboratory Construction of the National 211 Project of China: *Distributed Liquid Control System based on HS2000*, 1999

14. Industrial Project from Dashi Automation Engineering Co. LTD of China: *Visual Control Configuration based on LonWorks Field-bus*, 1998

Main Participant:

1. National Natural Science Foundation of China: *Software Parallelization and Data Distribution Optimization for High-Performance Embedded Systems*, 2012-2015

2. National Natural Science Foundation of China: *Research on Evolutionary Theory and Dynamic Balancing Feature of Power Intelligent Transactions Based on Multi-Agent Complex System*, 2013-2016

3. Industrial Project from Changsha Micro-Wave Bureau of China: *Micro-Wave Supervisor and Control System*, 1999

4. Industrial Project from Dashi Automation Engineering Co. LTD of China: *Grain depot Monitoring and Control System based on LonWorks Field-bus*, 1999

5. Industrial Project from Lianyuan Steel Mill of China: *Distributed and Intelligent Decoupling Control System for*

Coke Oven Collecting Pipe Pressure, 1996-1997

6. Industrial Project from Scientific Technology Development Co. LTD of Central South University of China: *General-Purpose Programmable Scanning Controller for Neon Light*, 1995-1996

Research Publications

Books:

1. "Embedded System——Composition, Principle and Development", Posts & Telecom Press, Beijing, 2006 (First Author)

2. "Advanced Software Development Process——Rational Unified Process, Agile Process and Microsoft Process", Tsinghua University Press, Beijing, 2005 (First Author)

International Journals and Conferences:

1. Industrial-QoS Oriented Remote Wireless Communication Protocol for the Internet of Construction Vehicles. *IEEE Transactions on Industrial Electronics* (TIE), 2015, Vol.62, No.11: 7103-7113. (**SCI-Q1，IF=6.5**；First Author）

2. Prioritization of candidate disease genes by combining topological similarity and with semantic similarity. *Journal of Biomedical Informatics*, 2015, Vol.57: 1-5. (**SCI-Q1，IF=2.194**；Corresponding Author）

3. Based on GO semantic similarity protein subcellular location prediction. *Journal of Computational and Theoretical Nanoscience*，2015. (**SCI-Q4**，Accepted；Corresponding Author）

4. Prioritizing Candidate Disease Genes Combined with Semantic Similarity by Walking on the Heterogeneous Network. *Journal of Computational and Theoretical Nanoscience*, 2015.(**SCI-Q4**，Accepted；Corresponding Author）

5. Reliable Fault Diagnosis Method Using Ensemble Fuzzy ARTMAP Based on Improved Bayesian Belief Method. *Neurocomputing*, 2014, Vol.133: 309-316. （ **SCI-Q2，IF=1.634**；First Author）

6. Whether and how to select inertia and acceleration of discrete particle swarm optimization algorithm: a study on channel assignment. *Mathematical Problems in Engineering*, 2014, Article ID 758906. （ **SCI-Q3，IF=1.383**；First Author）

7. Collision-Free and Energy-Saving Trajectory Planning for Large-Scale Redundant Manipulator Using Improved PSO. *Mathematical Problems in Engineering*, 2013, Article ID 208628. (**SCI-Q2，IF=1.383**；First Author）

8. Fuzzy ARTMAP Ensemble Based Decision Making and Application. *Mathematical Problems in Engineering*, 2013, Article ID 124263. (**SCI-Q2，IF=1.383**；First Author）

9. A Novel Evolutionary Algorithm Ensemble for Global Numerical Optimization. *International Journal on Artificial Intelligence Tools*, 2013, Vol.22, No.4: 1-21. (**SCI-Q4**；Corresponding Author ）

10. Short-term power load forecasting using grey correlation contest modeling. *Expert Systems with Applications*, 2012, Vol.39, No.1: 773-779. (**SCI-Q2，IF=1.854**；First Author）

11. Thick film resistors on stainless steel as sensing elements for strain sensor applications. *Sensors and Actuators A-Physical*, 2012, Vol. 179: 50－55. (**SCI-Q3，IF=1.841**；Corresponding Author）

12. Research and Practice of Training Teaching based on MSF Software Process. *Proceedings of 2011 International Conference on Computing, Information and Control*,2011,2: 73-80.（EI-Index；Corresponding Author）

13. A Qualitative and Quantitative Assessment Method for Software Process Model. *Proceedings of 2010 IEEE International Conference on Software Engineering and Service Science*, 2010: 286-291. （EI-Index ；Corresponding Author）

14. Improved GPRS Routing Algorithm and Its Performance Analysis. *Proceedings of 2010 IEEE International Conference on Software Engineering and Service Science*, 2010: 49-52.（EI-Index；Corresponding Author）

15. Design and Implementation of Self-help Business Hall Based on J2EE. *Proceedings of 2010 IEEE International Conference on Software Engineering and Service Science*, 2010: 576-578.（EI-Index；Corresponding Author）

16. The Design and Implementation of Embedded Configuration Software Based on Embedded-Linux. *Proceedings of 2008 International Conference on Computer Science and Software Engineering*, 2008, Vol.4: 98-101. （EI-Index；First Author）

17. Research of Embedded Motion Controller for Construction Machinery. *Proceedings of The Fifth IEEE International Symposium on Embedded Computing*, 2008: 201-206.（EI-Index；First Author)

18. Development and Application of a General Low-End Embedded Operating System. *Proceedings of 2007 International Symposium on Computer Science and Technology*, 2007: 643-647.（ISTP 收录；First Author）

Domestic Journals:

1. Integrated sensor online temperature compensation based on co-training and LS-SVM. *Journal of Electronic Measurement and Instrument,* 2013, Vol.27, No.11:1054-1059. (CSCD；Corresponding Author）

2. Research and application of vehicle embedded supervisory configuration software. *Journal of Electronic Measurement and Instrument,*, 2012, Vol.26, No.11: 1005-1010.（CSCD；Corresponding Author）

3. Sphere Boundary Offset Discrimination and Space Distribution Clustering for Fault Diagnosis. *Journal of Electronic Measurement and Instrument,*, 2012, Vol.26, No.10:877-882.（CSCD；Corresponding Author）

4. Design and Implementation of Embedded Web Server in Substation Automation System. *Automation of Electric Power Systems*, 2002, Vol.26, No.18: 65-69.（EI-Index；First Author）

5. An Ideal Realization Platform for Real-Time Distributed Multi-agent Control Theory－ Field-bus Control System. *Information and Control*, 2001, Vol. 30, No. 4: 322-327.（EI-Index；First Author）

6. An Methodology for Both Software and Hardware System Engineering Based on Agent-Oriented Life Cycle Method. *Chinese High Technology Letters*, 2001, Vol.11, No.11: 64-68.（EI-Index；First Author）

7. Zoom Chaos Optimization Expert Control System for Coke Oven Combustion. *The Chinese Journal of Nonferrous Metals*, 1999, Vol.9, No.3: 631-635.（EI-Index；First Author）

8. Design and Realization of LonWorks Field-bus Control System-CS2000 Based on Agent-Oriented Life Cycle Method. *Mini-Micro Systems*, 2001, Vol.22, No.11: 1294-1298.（EI-Index；First Author）

9. Development of Intelligent Report Sheets for Industry Real-time Control System in VBA and Excel. *Computer Engineering and Application*, 1999, Vol.35, No.7: 56-62.（CSCD；First Author）

10. A General-Purpose Programmable Scanning Controller of Colored Light. *Electricity and Automation* , 1997, Vol.26, No.5: 29-32.（First Author）

11. Design of Optimization Control System for Coke Oven Combustion. *Computer Technology and Automation* , 1997, 10: 25-30.（First Author）

12. Artificial intelligence technology in traditional Chinese medicine doctor evaluation System. *Journal of TCM Univ.*

of Hunan, 2010, 30(2): 27-29. (Corresponding Author)

13. Research and Improvement of PCF Real-time Performance in WLAN. *Microcomputer Information*, 2011, 27(8): 129-130.（CSCD；Corresponding Author）

14. Dynamic Compound Indexing Method for Moving Objects based on Road Distribution. *Journal of Computer Applications*, 2008, Vol.28, No.12 :3251-3253.（CSCD；Corresponding Author）

15. Application research of T/TCP protocol in VxWorks. *Journal of Computer Applications*, 2009, Vol.29, No.1 :234-237.（CSCD；Corresponding Author）

Research Honors and Awards

1. The Third Award of Science and Technology Development, Hunan Province, China, 2012

2. Young Core Faculty of Colleges and Universities, Hunan Province, China, 2008

3. The Second Award of Science and Technology Development, Hunan Province, China, 1999

4. The First Award of Science and Technology Development, Hunan Province, China, 1999

Academics

Master & doctoral degree programs and postdoctoral positions are open to international applicants now.

(Full-time postdoctoral salary is less than150,000 yuan per year. See http://postdoctor.hnu.cn/index.php?option= com_content&task =view&id=1016&Itemid)

Courses Taught:
- Principals of Embedded System,   Spring 2005-Current
- Advanced Software Development Process,   Fall   2004-Current

Selected Graduate Students Supervised:
- Duan Peng   2004, now a software programmer at Huawei Technologies Co. LTD
- Gong Chunhong   2004, now an associate professor at Hunan College of Finance and Economics
- Zhang Zhiming   2004, now a department manager of WeiSheng Information Technology Co. LTD
- Zhou Jihui   2005, now a vice president at Sany Intelligent Engineer Institute
- Luo Enze   2007, now an assistant general manager at Pukou porcelain Co. LTD
- Wu Dan   2008, now a Ph.D. student at Hunan University
- Qing Xiongzhi   2011, now a department manager at China Unicom,Changsha
- Liu Bin   2012, now a software programmer at Huawei Technologies Co. LTD
- Zeng Pan   2013, now a Ph.D. student at Hunan University

Academic Projects:

1. Excellent Courses Construction Program of Ministry of Education and IBM: *Principles of Embedded System*, 2008-2009 (Principal Investigator)

2. SIT Program of Hunan University: *Wireless Embedded Web-Server based on T/TCP*, 2007 (Principal Investigator)

3. Education Reform Research Program of Hunan Provincial Colleges and Universities: *Research and Practice of Creative*

Courses for Software Engineer, 2006-2000 (Main Participant)

Academic Awards:

1. The Third Award of Teaching Achievements, Hunan Province, China: *Research and Practice of "Learning by Doing" Talent Cultivation Mode* , 2009

2. The First Award of Teaching Achievements, Hunan University, China: *Systematic Research and Practice of "Three Hierarchies" Teaching Scheme* , 2008

Recent Professional Activities

- Member, IEEE
- Journal Reviewer, Journal of Central South University
- Journal Reviewer, Mathematical Problems in Engineering
- Journal Reviewer, Sensors & Actuators A. Physical