

## CURRICULUM VITA

Xudong He  
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### EDUCATION

Ph.D. Computer Science, Virginia Tech, 1989  
M.S. Computer Science, Nanjing University, China, 1984  
B.S. Computer Science, Nanjing University, China, 1982

### EMPLOYMENT

8/05-date: Professor, School of Computing and Information Sciences, FIU  
9/14-12/14: Visiting Professor, Department of Computer Science, Carnegie Mellon Univ.  
8/00-12/13: Director, Center for Advanced Distributed System Engineering, FIU  
8/01-7/05: Associate Professor, School of Computer Science, FIU  
1/00-7/01: Assistant Professor, School of Computer Science, FIU  
9/98-4/99: Visiting Associate Professor, School of Computer Science, FIU  
8/95-12/99: Associate Professor, Dept. of Computer Science, North Dakota State Univ.  
9/89-7/95: Assistant Professor, Dept. of Computer Science, North Dakota State Univ.

### PUBLICATIONS

#### Journals

- (1) Yujian Fu, Zhijiang Dong, Xudong He: "Formal Modeling and Analysis of Collaborative Humanoid Robotics", *International Journal of Robotics Applications and Technologies*, (IJRAT), vol. 6, no.1, 2018, p. 34-54.
- (2) X. He, Z. Dong, H. Yin, and Y. Fu: "A Framework for Developing Cyber-Physical Systems", *International Journal of Software Engineering and Knowledge Engineering – IJSEKE*, vol. 27, no.9, 2017, 1361 – 1386.
- (3) D. Alam and X. He: "A Method to Analyze Predicate Transition Nets Using SPIN Model Checker", *International Journal of Software Engineering and Knowledge Engineering – IJSEKE*, vol. 27, no.9, 2017, 1455 –1482.
- (4) Lily Chang and Xudong He: "A Methodology to Analyze Multi-Agent Systems Modeled in High Level Petri Nets", *International Journal of Software Engineering and Knowledge Engineering – IJSEKE*, vol.25, no.7, 2015, 1199-1235.
- (5) X. He: "A Comprehensive Survey of Petri Net Modeling in Software Engineering", *International Journal of Software Engineering and Knowledge Engineering - IJSEKE*, vol. 23, no. 5, 2013, 589-626.
- (6) Qianmu Li, Ming Zhu, Xudong He, Yong Qi, A Survey of Delay Tolerant Technology in Internet of Things, *Advances in Information Sciences and Service Sciences*. vol.5, no.6, 2013, 1072-1080.
- (7) L. Chang, S. Shatz, and X. He: "A Methodology for Modeling Multi-agent Systems using Nested Petri Nets", *International Journal of Software Engineering and Knowledge Engineering - IJSEKE*, vol.22, no.7, 2012, 891-926.
- (8) Li Qianmu, Hou Jun, LiuTing, He Xudong, Liu Kui, Qi Yong: "A Risk Assessment Method on the Implementation of Risk Education", *Energy Education Science and Technology Part B*, vol. 4, no. SI-1, 2012, 539-543.
- (9) J. Ding and X. He: "Formal Specification and Analysis of an Agent-Based Medical Image Processing System", *International Journal of Software Engineering and Knowledge Engineering*, vol. 20, no. 3, 2010, 311-345.

- (10) J. Lian, S. Shatz, and X. He: "Flexible Coordinator Design for Modeling Resource Sharing in Multi-Agent Systems", *Journal of Systems and Software*, vol. 82, no.10, 2009, 1709-1729.
- (11) J. Ding, P. Clarke, G. Argote, and X. He: "A Methodology for Evaluating Test Adequacy Coverage Criteria of High Level Petri Nets", *Information and Software Technology*, vol.51, 2009, 1520-1533.
- (12) L. Chang, J. Ding, X. He, S. Shatz: "A Formal Approach for Modeling Software Agents Coordination", *Comm. of SIWN*, vol. 3, 2008, 58-64.
- (13) Y Fu, Z. Dong, and X. He: "A Translator of Software Architecture Design from SAM to Java". *International Journal of Software Engineering and Knowledge Engineering*, vol. 17, no.6, 2007, 709-755.
- (14) J. Ding, P. Clarke, D. Xu, X. He, and Y. Deng: "A Formal Model-Based Approach for Developing An Interoperable Mobile Agent System", *The Multi-Agent and Grid Systems – An International Journal*, vol.2, no.4, 2006, 401-412.
- (15) J. Ding, D. Xu, Y. Deng, and X. He: "Modeling and Analyzing a Mobile Agent-based Clinic Information System", *International Journal of Intelligent Control Systems*, vol. 10, no. 2, June 2005, 143-151.
- (16) Y. Deng, J. Wang, X. He, and J. Tsai: "Constraint Propagation and Progressive Verification for Component-based Process Model", *International Journal of Software Engineering and Knowledge Engineering*, vol.14, no.5, 2004, 471-496.
- (17) X. He, H. Yu, T. Shi, J. Ding, and Y. Deng: "Formally Analyzing Software Architectural Specifications Using SAM", *Journal of Systems and Software*, vol.71, no.1-2, 2004, 11-29.
- (18) X. He, W. Chu, and H. Yang: "A New Approach to Verify Rule-Based Systems using Petri Nets", *Information and Software Technology*, vol.45, no.10, 2003, 663-670.
- (19) H. Zhu and X. He: "A Methodology for Testing High-Level Petri Nets", *Information and Software Technology*, vol.44, 2002, 473-489.
- (20) D. Xu, X. He, and Y. Deng: "Schedulability Analysis of Real-Time Systems Using Time Petri Nets", *IEEE Transaction on Software Engineering*, vol.28, no.10, 2002, 984-996.
- (21) X. He and Y. Deng: "A Framework for Developing and Analyzing Software Architecture Specifications in SAM", *The Computer Journal*, vol.45, no.1, 2002, 111-128.
- (22) X. He: "PZ Nets - A Formal Method Integrating Petri Nets with Z", *Information and Software Technology*, vol.43, no.1, 2001, 1-18.
- (23) W. Chu, C. Lu, H. Yang, and X. He: "A Formal Approach for Component Retrieval and Integration Analysis", *Journal of Software Maintenance*, vol.12, no.6, 2000, 325-342.
- (24) X. He and Y. Deng: "Specifying Software Architectural Connectors in SAM", *International Journal of Software Engineering and Knowledge Engineering*, vol.10, no.4, 2000, 411-431.
- (25) W. Chu, C. Lu, C. Shiu and X. He: "Pattern Based Software Re-engineering: A Case Study", *Journal of Software Maintenance*, vol.12, no.2, 2000, 121-141.
- (26) X. He: "Translating Hierarchical Predicate Transition Nets into CC++ Programs", *Information and Software Technology*, vol.42, no.7, 2000, 475-488.
- (27) J. Wang, X. He, and Y. Deng.: "Introducing Architectural Specification and Analysis in SAM through An Example", *Information and Software Technology*, vol. 41, 1999, 451-467.
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- (29) W. Yao and X. He: "Mapping Petri Nets to Concurrent Programs in CC++", *Information and Software Technology*, vol.39, 1997, 485-495.
- (30) C. Kan and X. He: "A Method for Constructing Algebraic Petri Nets", *Journal of Systems and Software*, vol.35, 1996, 12-27.
- (31) C. Kan and X. He: "Deriving Algebraic Petri Nets Specifications from Structured Analysis - A Case Study", *Information and Software Technology*, vol.37, no.8, 1995, 411-434.
- (32) C. Kan and X. He: "High Level Algebraic Petri Nets", *Information and Software Technology*, vol.37, no.1, 1995, 23-30.

- (33) X. He: "Temporal Predicate Transition Nets - A New Formalism for Specifying and Verifying Concurrent Systems", *International Journal of Computer Mathematics*, vol.45, no.1/2, 1992, 171-184.
- (34) X. He and J.A.N. Lee: "A Methodology for Constructing Predicate Transition Net Specifications", *Software - Practice & Experience*, vol. 21, no.8, 1991, 845-875.
- (35) J.A.N. Lee and X. He: "A Methodology for Test Selection", *Journal of Systems and Software*, vol.13, no.3, 1990, 177-185.
- (36) X. He and J.A.N. Lee: "Integrating Predicate Transition Nets with First Order Temporal Logic in the Specification and Verification of Concurrent Systems", *Formal Aspects of Computing*, vol.2, no.3, 1990, 226-246.
- (37) X. He and J.A.N. Lee: "A Comparison of Formal Definitions of Ada Tasking", *ADATECH* (French), no. 10, November-December, 1989, 34-55.
- (38) X. He and J. Xu: "The Design of the Static Denotational Semantics of XCY", *Journal of Computer Research and Development* (Chinese), no.7, 1985, 50-55.

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- (39) Xudong He: "A Personal Journey in Petri Nets Research", "Carl Adam Petri - His Ideas, Personality, and Impact: Personal Stories", (Wolfgang Reisig ed.), Springer Verlag, 2019 (in press).
- (40) Yujian Fu, Zhijiang Dong, Xudong He: "Architecture-Centered Integrated Verification", *Modern Software Engineering Concepts and Practices: Advanced Approaches*, IGI Global, 2011, 104-124.
- (41) Yujian Fu, Zhijiang Dong, Phil Bording, Xudong He: "Towards rewriting semantics of software architecture specification", *Petri Nets: Applications* (Editor: Pawel Pawlewski), INTEH, ISBN: 978-953-307-047-6, Feb 2010.
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- (43) T. Shi and X. He: "*Specification and Analysis of Software Architectures*", VDM Publishing, Germany, 2007
- (44) X. He, H. Yu, Y. Deng: "Formal Methods for Specifying and Analyzing Complex Software Systems", *Advances in Machine Learning Application in Software Engineering* (ed. Du Zhang and Jeffrey Tsai), Idea Group Publishing, 2007, Chapter 13, 319-345.
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- (46) H. Zhu and X. He: "A Methodology for Component Integration Testing", *Testing Commercial-off-the-Shelf Components and Systems* (eds. Sami Beydeda and Volker Gruhn), Springer, 2005, 239-272.
- (47) X. He and T. Murata: "High-Level Petri Nets – Extensions, Analysis, and Applications", *Electrical Engineering Handbook* (ed. Wai-Kai Chen), Elsevier Academic Press, 2005, 459-476.
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- (49) Xudong He, Zhijiang Dong, Yujian Fu: "A Systematic Approach for Developing Cyber Physical Systems", Proc. of the 30th International Conference on Software Engineering & Knowledge Engineering (SEKE'18), Redwood, CA, 2018, 456-455.
- (50) Dewan Mohammad Moksedul Alam, Xudong He, William C. Chu: "Modeling and Analyzing Hybrid Systems Using Hybrid Predicate Transition Nets", Proc. of the 30th International Conference on Software Engineering & Knowledge Engineering (SEKE'18), Redwood, CA, 2018, 397-396.
- (51) Xudong He: "Modeling and Analyzing Cyber Physical Systems Using High Level Petri Nets". *Proc. of The 2018 IEEE International Conference on Software Quality, Reliability & Security (QRS'18)*, QRS Companion, Lisbon, Portugal, 2018, 469-476.

- (52) Zhuo Sun, Reng Zeng, Xudong He: “A Method for Predicting Two-Variable Atomicity Violations”, *Proc. of The 2018 IEEE International Conference on Software Quality, Reliability & Security (QRS’18)*, Lisbon, Portugal, 2018, 103-110.
- (53) X. He: “Modeling and Analyzing the Android Permission Framework using High Level Petri Nets”, *Proc. of The 2017 IEEE International Conference on Software Quality, Reliability & Security (QRS’17)*, Prague, July 25 – 29, Czech Republic.
- (54) X. He, Z. Dong, H. Yin, and Y. Fu: “A Framework for Developing Cyber Physical Systems”, *Proc. of the 29th International Conference on Software Engineering & Knowledge Engineering (SEKE’17)*, July 5 - July 7, 2017, Pittsburgh, USA (**Best Paper Award**).
- (55) D. Alam, and X. He: “A Method to Analyze High Level Petri Nets using SPIN Model Checker”, *Proc. of the 29th International Conference on Software Engineering & Knowledge Engineering (SEKE’17)*, July 5 - July 7, 2017, Pittsburgh, USA.
- (56) Xudong He and Yujian Fu: “Modeling and Analyzing Security Patterns using High Level Petri Nets”, *Proc. of the 28th International Conference on Software Engineering and Knowledge Engineering (SEKE16)*, Redwood, CA, July 1 – 3, 2016.
- (57) Xudong He, Reng Zeng, Su Liu, Zhuo Sun, and Kyungmin Bae: “A Term Rewriting Approach to Analyze High Level Petri Nets”, *Proc. of the 10th Theoretical Aspects of Software Engineering Conference (TASE 16)*, Shanghai, China, July 17 – 19, 2016.
- (58) Jose Pereyra, Ali Mostafavi, and Xudong He: “Multi-Agent Framework for Complex Adaptive Modeling of Interdependent Critical Infrastructure Systems”, *Proc. of the 2016 Construction Research Congress (CRC 16)*, San Juan, Puerto Rico, May 31 – June 2, 2016.
- (59) Fangxiong Xiao, Huaqing Min, Xu Bo, and Xudong He: “A Formal Modeling Method for Cost-Aware Service Composition”, *Proc. of the 25th International Conference on Software Engineering and Data Engineering (SEDE 15)*, San Diego, CA, Oct. 12 – 14, 2015.
- (60) Su Liu and Xudong He: “PIPE+Verifier - A Tool for Analyzing High Level Petri Nets”, *Proc. of the 27th International Conference on Software Engineering and Knowledge Engineering (SEKE15)*, Pittsburgh, July 6 – 8, 2015.
- (61) Reng Zeng, Zhuo Sun, Su Liu, and Xudong He: “A Method for Improving the Precision and Coverage of Atomicity Violation Predictions”, *Proc. of 21st International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS 15)*, LNCS vol. 9035, London, UK, April 11 – 18, 2015, 116 – 130.
- (62) K. Morris, P. Clarke, X. He, F. Costa, and M. Allison: “A Method for Validating Intent Model Behavior in DSVMs”, *Proc. of the 16th IEEE International Symposium on High Assurance Systems Engineering (HASE 15)*, Daytona Beach, Florida, USA, January 8 – 10, 2015, 247 – 254.
- (63) M. Allison, P. Clarke, and X. He: “A Generic Model of Execution for Synthesizing Interpreted Domain-Specific Models”, *Proc. of the 2015 International Conference on Soft Computing and Software Engineering (SCSE 15)*, *Procedia Computer Science*, vol. 62, Berkeley, CA, March 3 – 4, 2015, 495 – 504.
- (64) Su Liu, Reng Zeng, Zhuo Sun, and Xudong He: “Bounded Model Checking High Level Petri Nets in PIPE+Verifier”, *Proc. of International Conference on Formal Engineering Methods (ICFEM 14)*, LNCS vol. 8829, Luxembourg, Nov. 1 – 5, 2014, 348–363.
- (65) Reng Zeng, Zhuo Sun, Su Liu, and Xudong He: “McPatom: A Predictive Analysis Tool for Atomicity Violation using Model Checking”, *Proc. of 19th International SPIN Workshop on Model Checking of Software (SPIN 12)*, Oxford, UK, 23-24 July 2012, 191-207.
- (66) Su Liu, Reng Zeng, Zhuo Sun, and Xudong He: “SAMAT - A Tool for Software Architecture Modeling and Analysis”, *Proc. of the 24th International Conference on Software Engineering and Knowledge Engineering*, San Francisco, CA, July, 2012, 352-358.
- (67) Su Liu, Reng Zeng, Xudong He: “PIPE+ - A Modeling Tool for High Level Petri Nets”, *Proc. of International Conference on Software Engineering and Knowledge Engineering (SEKE11)*, Miami, July 2011, 115 - 121.

- (68) Reng Zeng, Yu Huang, Su Liu, Peter J. Clarke, Xudong He, Gwendolyn W. van der Linden, Jon L. Ebert: "SC-xScript: An Embedded Script Language for Scientific Computation in Embedded Systems", *Proc. of International Conference on Software Engineering and Knowledge Engineering (SEKE11)*, Miami, July 2011, 308 - 314.
- (69) Reng Zeng, Xudong He, Wil Aalst: "A Method to Mine Workflows from Provenance for Assisting Scientific Workflow Composition", *Proc. of IEEE 2011 Fifth International Workshop on Scientific Workflows (SWF 2011)*, Washington, D.C., July 2011, 169-175.
- (70) Reng Zeng, Xudong He, Jiafei Li, Zheng Liu, W.M.P. van der Aalst: "A Method to Build and Analyze Scientific Workflows from Provenance through Process Mining", *Proc. of 3rd USENIX Workshop on the Theory and Practice of Provenance (TaPP 2011)*, Heraklion, Crete, Greece, June 21-22, 2011.
- (71) Lily Chang and Xudong He: "A Model Transformation Approach for Verifying Multi-Agent Systems using SPIN", *Proc. of 26th ACM Symposium on Applied Computing*, Taichung, Taiwan, March, 2011, 37-42.
- (72) R. Zeng and X. He: "Analyzing a Formal Specification of Mondex using Model Checking", *Proc. of International Colloquium on Theoretical Aspects of Computing*, September 1-3, 2010, Natal, Rio Grande do Norte, Brazil, 214-229.
- (73) L. Chang and X. He: "A Multi-Agent Model for a Business Continuity Information Network", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE10)*, San Francisco, July, 2010, 657-663.
- (74) L. Chang and X. He: "Towards Adaptable BDI Agent: a Formal Aspect-Oriented Modeling Approach", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE09)*, Boston, July, 2009, 189-193.
- (75) L. Chang and X. He: "Specifying Agent Knowledge using Predicate Transition Nets", *Proc. of Workshop on Petri Nets and Distributed Systems (PNDS09)*, Paris, France, June, 2009.
- (76) Y. Fu, Z. Dong, J. Ding, X. He, V. Atluri, and S. Liu: "Modular Verification of Software Architecture Model", *The 2009 International Conference on Software Engineering Research and Practice*, Las Vegas, July, 2009, 17-23.
- (77) R. Zeng, J. Liu, and X. He: "A Formal Specification of Mondex Using SAM", *Proc. of Service Oriented System Engineering*, Taiwan, Dec. 2008, 97-102.
- (78) Y. Fu, Z. Dong, J. Ding, and X. He: "Mapping Software Architecture Specification to Rewriting Logic", *Proc. of the 8th International Conference on Software Quality (QSIC'08)*, Oxford, U.K., Aug., 2008, 376-381.
- (79) X. He: "A Formal Framework for Software System Modeling, Analysis and Realization". *Proc. of Software Engineering Research and Practice 2008*, Las Vegas, July, 2008, 627-633. (**Invited Keynote**).
- (80) L. Chang, X. He, J. Lian, and S. Shatz: "Applying a Nested Petri Net Modeling Paradigm to Coordination of Sensor Networks with Mobile Agents", *Proc. of Workshop on Petri Nets and Distributed Systems (PNDS08)*, Xian, China, June, 2008, 132-145
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- (82) J. Ding, G. Argote, P. Clarke, and X. He: "Evaluating Test Adequacy Coverage of High Level Petri Nets Using Spin", *Proc. of the 3rd Workshop on Automation of Software Testing*, Leipzig, Germany, 11 May 2008, 71-78.
- (83) J. Ding, L. Mo, and X. He: "An Approach for Specification Construction Using Property Preserving Refinement Patterns", *Proc. of the 23rd ACM Symposium on Applied Computing*, Fortaleza, Ceará, Brazil, March 16 - 20, 2008, 797-803.
- (84) Y. Fu, Z. Dong, G. Argote, L. Shi, and X. He: "An Approach to Validating Translation Correctness from SAM to Java", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE07)*, Boston, July, 2007, 45-51.

- (85) A. Lian, S. Shatz, and X. He: "Component Based Multi-Agent System Modeling and Analysis: A Case Study", *Proc. of the 2007 International Conference on Software Engineering Research and Practice (SERP'07)*, Las Vegas, June 25-28, 2007, 183-189.
- (86) D. Xu and X. He: "Generation of Test Requirements from Aspectual Use Cases", *Proc. of the 3<sup>rd</sup> Workshop on Testing of Aspect-Oriented Programs (WTAOP07)*, March 12-13, 2007 Vancouver, British Columbia, Canada, 17-22.
- (87) Y. Fu, Z. Dong, and X. He: "A Method for Realizing Software Architecture Design", *Proc. of the 6<sup>th</sup> International Conference on Software Quality (QSIC'06)*, Beijing, China., Oct., 2006, 57-64.
- (88) Y. Fu, Z. Dong, and X. He: "Modeling, Validating and Automating Composition of Web Services", *Proc. of the 6<sup>th</sup> International Conference on Web Engineering*, Palo Alto, California, U.S.A., July, 2006, 217-224 (**Best Paper Finalist**).
- (89) Y. Fu, Z. Dong, and X. He: "Formalizing and Validating UML Architecture Description of Web Systems", *Proc. of Second International Workshop on Model Driven Web Engineering (MDWE'06)*, Palo Alto, California, U.S.A., July, 2006.
- (90) Y. Huang, and X. He: "A Method for Modeling Object-Oriented Systems with PZ Nets", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE06)*, San Francisco, 2006, 456-462.
- (91) H. Yu, D. Liu, Z. Shao, and X. He: "Modeling Complex Software Systems using An Aspect-oriented Extension of Object-Z", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE06)*, San Francisco, 2006, 11-16.
- (92) W. Sun, T. Shi, G. Argote, Y. Deng, and X. He: "Achieving Better System Design through Formal Modeling and Analysis", *Proc. of the International Conference on Software Engineering and Knowledge Engineering (SEKE06)*, San Francisco, 2006, 463-468.
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- (94) Y. Fu, Z. Dong, and X. He: "An Approach to Web Services oriented Modeling and Validation", *Proc. of International Workshop on Service-Oriented Software Engineering*, Shanghai, China, May, 2006.
- (95) Z. Dong, Y. Fu, and X. He: "UML Consistency Checking through Transformation based Petri Net Framework", *Proc. of Workshop on Consistency in Model Driven Engineering*, Germany, Nov. 2005.
- (96) Z. Dong, Y. Fu, Yue Fu, and X. He: "Automated Runtime Validation of Software Architecture Design", *Proc. of the Second International Conference on Distributed Computing and Internet Technology*, 2005, Bhubaneswar, India, December 22-24, 2005, 446-457.
- (97) Y. Fu, Z. Dong, and X. He: "An Approach to Validation of Software Architecture", *Proc. of the 12<sup>th</sup> Asia-Pacific Software Engineering Conference*, Taiwan, Dec. 2005, 375-384.
- (98) J. Ding, Z. Dai, J. Wang, and X. He: "Formally Modeling and Analyzing a Secure Mobile Agent Finder", *Proc. of the IEEE Conference on System, Man, and Cybernetics*, Hawaii, 2005, 47-52.
- (99) Z. Dong, Y. Fu, and X. He: "An Integrated Run-Time Monitoring Framework for Software Architecture Verification", *Proc. of the 9<sup>th</sup> IASTED International Conference on Software Engineering and Applications*, Phoenix, Nov. 2005.
- (100) H. Yu, D. Liu, L. Yang, X. He : "Formal Aspect-oriented Modeling and Analysis by AspectZ", *Proc. of the International Conference on Software Engineering and Knowledge Engineering*, Taipei, Taiwan, 2005, 175-180.
- (101) Y. Fu, Z. Dong, and X. He: "A Methodology of Automated Realization of A Software Architecture Design", *Proc. of the International Conference on Software Engineering and Knowledge Engineering*, Taipei, Taiwan, 2005, 412-417.
- (102) J. Ding, D. Xu, Y. Deng, P. Clarke, X. He: "Design of an Interoperable Mobile Agent System based on predicate Transition Net Model", *Proc. of the International Conference on Software Engineering and Knowledge Engineering*, Taipei, Taiwan, 2005, 560-565.



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- (104) X. He: “A Framework for Ensuring System Dependability from Design to Implementation”, *Proc. of the 3<sup>rd</sup> International Workshop on Modeling, Simulation, Verification and Validation of Enterprise Information Systems*, Miami, 2005, 3-12. (**Invited Keynote**).
- (105) Z. Dai, X. He, J. Ding, and S. Gao: “Modeling and Analyzing Security Protocols in SAM: A Case Study”, *Proc. of IASTED International Conference on Software Engineering and Applications (SEA 2004)*, Cambridge, MA, 2004, 115-121.
- (106) S. Gao, Y. Deng, H. Yu, X. He, K. Beznosov, K. Cooper: “Applying Aspect-Orientation in Designing Security Systems - A Case Study”, *Proc. of International Conference on Software Engineering and Knowledge Engineering 2004*, Banff, Canada, 2004, 360-365.
- (107) H. Yu, X. He, Y. Deng, L. Mo: “Integrating Security Administration into Software Architecture Design”, *Proc. of International Conference on Software Engineering and Knowledge Engineering 2004*, Banff, Canada, 2004, 416-420.
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- (109) H. Reza and X. He: “An Integrated Method to Software Architecture”, *Proc. of SEKE 2003*, CA, 2003, 398-405.
- (110) Z. Dong, Y. Fu, and X. He: “Deriving Hierarchical Predicate/Transition Nets from Statechart Diagrams – A Case Study”, *Proc. of SEKE 2003*, California, 2003, 150-157.
- (111) H. Yu, X. He, S. Gao, and Y. Deng: “Formal Software Architecture Design of Secure Distributed Systems”, *Proc. of SEKE 2003*, California, 2003, 450-457.
- (112) H. Reza and X. He: “Pattern-Based Software Architecture: A Case Study”, *Proc. of the IEEE International Conference on Information Technology: Coding and Computing*, Las Vegas, 2003, 592-597.
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- (122) X. Liu, Y. Deng, and X. He: “Development of A Distributed Time Petri Net Simulator in the SAM Framework”, *Proc. of the Symp. On Performance Evaluation of Computer and Telecommunication Systems*, Orlando, 2001, 223-230.

- (123) H. Zhu and X. He: "An Observation Theory of Integration Testing for Component-Based Software Development", *Proc. of the 25<sup>th</sup> International Computer Software and Application Conference (COMPSAC'2001)*, Chicago, 2001, 363-370.
- (124) H. Zhu and X. He: "Constructions of Behavior Observation Schemes in Software Testing", *Proc. Of the 5<sup>th</sup> High Assurance Computer Systems (HASE2000)*, New Mexico, Nov. 2000, 7-16.
- (125) X. He: "Formalizing Class Diagrams Using Hierarchical Predicate Transition Nets", *Proc. of the 24<sup>th</sup> International Computer Software and Application Conference (COMPSAC'2000)*, Taiwan, Oct., 2000, 217-222.
- (126) S. Lewandowski and X. He: "Automating the Generation of Code for A Hierarchical Predicate Transition Net Based Design", *Proc. of the 12th International Conference on Software Engineering and Knowledge Engineering*, Chicago, July, 2000, 15-22.
- (127) H. Zhu and X. He: "A Theory of Testing High-Level Petri Nets", *Proc. of the IFIP 16th World Computer Congress*, Beijing, China, August, 2000, 443-450.
- (128) X. He: "Formalizing Use Case Diagrams in Hierarchical Predicate Transition Nets", *Proc. of the IFIP 16th World Computer Congress*, Beijing, China, August, 2000, 484-491.
- (129) W. Chu, C. Lu, C. Shiu and X. He: "Pattern Based Software Re-engineering: A Case Study", *Proc. of the Asia Pacific Software Engineering Conference (APSEC'99)*, 1999, 300-308.
- (130) S. Zhou, H. Yang, P. Luker, W. Chu, and X.He: "A Useful Approach to Developing Reverse Engineering Metrics", *Proc. of the 23<sup>rd</sup> International Computer Software and Application Conference (COMPSAC'99)*, Pheonix, 1999, 320-321.
- (131) W. Chu, J.Shiu, C. Lu, and X. He: "A Semi-Formal Approach to Assist Software Design with Reuse", *Proc. of International Conference on Software Maintenance (ICSM'99)*, Oxford, England, 1999, 256-264.
- (132) X. He, F. Zeng, and Y. Deng: "Specifying Software Architectural Connectors in SAM", *Proc. of 11th International Conf. on Software Engineering and Knowledge Engineering (SEKE'99)*, Kaiserlautern, Germany, 1999, 144-151 (**Best Paper Award**).
- (133) X. He, W. Chu, H. Yang, and S. Yang: "A Reachability Graph Technique for Verifying Rule Based Systems", *Proc. of the 23<sup>rd</sup> International Computer Software and Application Conference (COMPSAC'99)*, Pheonix, Arizona, 1999, 462-467.
- (134) J. Wang, Y. Deng, and X. He: "A Formal Architectural Specification Model for Real-Time Systems", *Proc. of the IASTED Conference on Software Engineering*, Las Vegas, 1998, 11-14.
- (135) S. Lewandowski and X. He: "A Java Framework for Implementing Hierarchical Predicate Transition Nets", *Proc. of the 10<sup>th</sup> International Conference on Software Engineering and Knowledge Engineering (SEKE'98)*, San Francisco, 1998, 261-268.
- (136) X. He: "Transformations on Hierarchical Predicate Transition Nets: Abstractions and Refinements", *Proc. of the 22<sup>nd</sup> International Computer Software and Application Conference (COMPSAC'98)*, Vienna, Austria, 1998, 164-169.
- (137) X. He and W. Yao: "From Hierarchical Predicate Transition Nets to CC++ Program Skeletons - Translation Architecture and Rules", *Proc. of the 21th Annual International Compouter Software and Applications Conference (COMPSAC'97)*, Washington, D.C., 1997, 64-69.
- (138) X. He and Y. Ding: "Object-Oriented Specification using Hierarchical Predicate Transition Nets", *Proc. of 2nd International Workshop on Object-Oriented Programming and Models of Concurrency (OOMC'96)*, Osaka, Japan, 1996, 72-79.
- (139) W. Yao and X. He: "Mapping Petri Nets to Parallel Programs in CC++", *Proc. of the 20th Annual International Compouter Software and Applications Conference (COMPSAC'96)*, Seoul, Korea, 1996, 70-75.
- (140) X. He: "A Formal Definition of Hierarchical Predicate Transition Nets", *Proc. of the 17th International Conference on Application and Theory of Petri Nets (ICATPN'96)*, *Lecture Notes in Computer Science*, vol. 1091, Osaka, Japan, 1996, 212-229.



- (141) X. He: "A Method for Analyzing Properties of Hierarchical Predicate Transition Nets", *Proc. of the 19th Annual International Computer Software and Applications Conference (COMPSAC'95)*, Dallas, TX, August, 1995, 50-55.
- (142) X. He: "PZ Nets - A Formal Method Integrating Petri Nest with Z", *Proc. of the 7th International Conference on Software Engineering and Knowledge Engineering (SEKE'95)*, Rockvill, MD, June, 1995, 173-180.
- (143) C. Kan and X. He: "Algebraic Petri Nets and Their Applications", *Proc. of the ACM Annual Computing Science Conference (CSC'94)*, Phoenix, Arizona, March, 1994, 396-403.
- (144) X. He and Y. Ding: "A Temporal Logic Approach for Analyzing Safety Properties of Predicate Transition Nets", *Proc. of the 12th IFIP World Computer Congress (Information Processing'92)*, Madrid, Spain, 1992, 127-133.
- (145) X. He and C.H. Yang: "Structured Analysis Using Hierarchical Predicate Transition Nets", *Proc. of the 16th Int'l Computer Software and Applications Conf. (COMPSAC'92)*, Chicago, 1992, 212-217.
- (146) X. He: "Specifying and Verifying Real-Time Systems Using Time Petri Nets and Real-Time Temporal Logic", *Proc. of the 6th Annual Conference on Computer Assurance (COMPASS'91)*, Gaithersburg, MD, June, 1991, 135-140.
- (147) X. He: "Temporal Predicate Transition Nets and Their Applications", *Proc. of the 14th Int'l Computer Software and Applications Conference (COMPSAC'90)*, Chicago, 1990, 261-266.
- (148) X. He and J.A.N. Lee: "A New Methodology for Writing Predicate Transition Petri Nets Specifications", *Proc. of the 1st Annual Symposium on Parallel and Distributed Processing*, Dallas, Texas, May, 1989, 26-27.
- (149) X. He and J.A.N. Lee: "Deriving Temporal Logic Specifications from Predicate Transition Petri Net Specifications", *Proc. of the 1st Int'l Conference on Software Engineering and Knowledge Engineering (SEKE90)*, Chicago, June, 1989, 116-121.
- (150) X. He, R. Iyengar and J. Roach: "A Systematic Study of Unification", *Proc. of the 3rd International Symposium on Knowledge Engineering*, Madrid, Spain, Oct. 1988, 27-36.
- (151) X. He and J.A.N. Lee: "A Strategy for Integrating Formalisms in Software Development", *Proc. of the 6th Annual CIPS Edmonton Computer Conference*, Edmonton, Canada, Nov. 1988, 33-42.
- (152) X. He, R. Russell and J.W. Dickey: "Workload Analysis Expert System and Optimizer", *Proc. of the 7th International Conference on Cybernetics and Systems*, London, Sept. 1987, 68-73.

## FUNDED RESEARCH

- (1) X. He (PI): "A Runtime Checker with Evolutionary Algorithm Decision Making", Air Force Research Lab., \$349,757, 1/2015-12/2017.
- (2) X. He (co-PI): "Center for Innovative Information Systems Engineering", NSF, HRD-0833093, \$5,000,000, 8/2008 – 7/2015. **Component PI** with budget \$825,000, 8/2008-7/2015.
- (3) X. He (PI): "Petri Nets Controller for Robotic Grasping", NSF SBIR IIA, subcontract from Energid, Inc., \$70,000. 9/15/11 – 12/15/12.
- (4) X. He (co-PI): "Graduate Assistance in Computer Science at Florida International University", Department of Education, \$545,000, 9/1/09 – 8/30/2012.
- (5) X. He (PI): "An Integrated Software Tool for Modeling and Model-based Control of Semiconductor Manufacturing Equipment", *NSF SBIR IIA* subcontract from SC Solutions, Inc., \$105,000, 5/1/08 – 4/31/09.
- (6) X. He (PI): "Graduate Assistance in Computer Science at Florida International University", *Department of Education*, \$383,643, 9/1/07 – 8/30/2010.
- (7) X. He (PI): "Development of New Simulation Software for Advanced Energy Systems", *NSF, HRD-0317692* (Supplement), \$100,000, 8/1/06 – 7/31/07.
- (8) X. He (PI): "Distributed Flexible-Resource Scheduling in Production Systems", *NSF SBIR IIA* subcontract from LS Optimal, Inc., \$105,000, 8/1/06 – 7/31/07.

- (9) X. He (co-PI): "Center of Emerging Technologies for Advanced Information Processing and High-Confidence Systems", *NSF, HRD-0317692*, \$4,500,000, 8/2003 – 7/2008. **Component PI** with budget \$900,000, 8/2003-7/2008.
- (10) X. He (PI): "Specification and Analysis of Software Architectures of High-Assurance Systems", *NASA, NAG2-1440, Faculty Award for Research*, \$287,338, 10/1/2000 – 9/30/2003.
- (11) X. He (co-PI): "CREST: Florida A&M University/Florida International University Center for Distributed Computing: Theory, Development and Application", *NSF, HRD-9707076*, \$5,000,000 (9/1/97 – 8/31/02). **Component PI** with budget \$400,000, 9/1/00 – 8/31/03.
- (12) X. He (PI): "A Theory and Methodology for Testing Concurrent Software Systems", *NSF*, \$29,013, 5/1/98 – 4/31/2001.
- (13) X. He (PI): "Deriving Formal Specifications from Informal Object-Oriented Specifications", *DoD, ONR*, \$323,619, 5/15/98 – 5/15/2001.
- (14) X. He (PI): "Deriving Formal Specifications from Object-Oriented Analysis", *NSF, EPSCoR* (Experimental Programs for Stimulating Competitive Research), \$10,000, 7/1/97 – 6/30/98.
- (15) X. He (PI): "Theory, Analysis and Application of Hierarchical Predicate Transition Nets", *NSF, Research Initiation Award*, \$85,878, 8/15/93 – 7/31/97.
- (16) X. He (PI): "Specifying and Verifying Concurrent and Distributed Systems Using Hierarchical Predicate Transition Nets", *NDSU, Seed Grant*, \$4,000, 5/1/95 – 4/31/96.
- (17) X. He (PI): "Specifying and Verifying Concurrent and Distributed Systems Using Hierarchical Predicate Transition Nets", *NSF, EPSCoR*, \$48,000, 10/15/92 – 6/30/95.
- (18) X. He (PI): "Integrating Predicate Transition Nets with the Algebraic Approach in the Formal Specification of Software Systems", *NSF, EPSCoR*, \$14,000, 10/15/90 – 10/15/91.

## TEACHING

### Courses Taught at FIU

- (1) CEN4010 Software Engineering I (spring 2004, fall 2007, spring 2016)
- (2) CEN4021 Software Engineering II (spring 2013)
- (3) CEN5011 Advanced Software Engineering (fall 2000 & 2001, summer 2004, fall 2012, 2013, spring 2017)
- (4) CEN5064 Software Design (spring 2006)
- (5) CEN5087 Software and Data Modeling (fall 2013, 2016 – 2018 & spring 2014 – 2019)
- (6) CEN 6070 Software Verification (fall 2006 & 2008, spring 2010, 2012)
- (7) CEN6075 Software Specification (fall 2005-2007, spring 2011 & 2014)
- (8) CEN6612 Advanced Topics in Software Engineering (spring 2001 & 2003)
- (9) CEN6993 Software Verification (spring 2005)
- (10) COP6556 Semantics of Programming Languages (spring 2000, 2002, 2004, 2011)
- (11) COT4555 Principles of Programming Languages (fall 2011, spring 2012, summer 2014 - 2017)
- (12) COT6405 Analysis of Algorithms (spring 2000 & 2001, fall 2002 & 2003)
- (13) COT6421 Theory of Computation II (spring 2002 & 2003, fall 2010)
- (14) CIS5900 Independent Studies (taught over 20 independent studies since 2000).

### Courses Taught at North Dakota State Univ.

- (1) CS222 Discrete Mathematics (fall, 1995)
- (2) CS213 System Analysis and Design (fall, 1989 - 91)
- (3) CS313 System Testing and Maintenance (winter, 1990 - 92)
- (4) CS316 System Testing and Maintenance (spring, 1993-98)
- (5) CS413 Information Systems Design (spring, 1990 - 92)
- (6) CS508 Math. Foundations of Prog. Methodology (fall, 1990)
- (7) CS526 Automated Theorem Proving (spring, 1990)
- (8) CS583 Formal Methods in Software Eng. (winter, 1991)

- (9) CS713 Software Engineering I (fall, 1992-97, 99)
- (10) CS714 Software Engineering II (spring, 1993 & 95 & 97-98)
- (11) CS783 Software Design Patterns & Architectures (spring, 1996)
- (12) CS789 Automated Theorem Proving (spring, 1994)

## GRADUATE STUDENT ADVISING

I am the sole major advisor or co-advisor identified by \*, of the following students. I have also served on about 100 M.S. and Ph.D. theses committees.

### Graduates at FIU

<b>Z. Sun</b> (Ph.D.), 12/18	<b>S. Liu</b> (Ph.D.) 7/14	<b>R. Zeng</b> (Ph.D.) 7/13
<b>L. Chang</b> (Ph.D.) 4/11	<b>G. Argote</b> (Ph.D.), 4/09	<b>*W. Sun</b> (Ph.D.), 4/08
<b>Y. Fu</b> (Ph.D.), 4/07	<b>Z. Dong</b> (Ph.D.), 7/06	<b>T. Shi</b> (Ph.D.), 4/06
<b>*S. Gao</b> (Ph.D.), 12/05	<b>L. Mo</b> (Ph.D.), 11/04	<b>J. Ding</b> (Ph.D.), 4/04
S. Miner (M.S.), 9/04	A. Awadallah (M.S.), 4/04	S. Gururaj (M.S.), 11/03
V. Masuram (M.S.), 6/03	X. Li (M.S.), 11/02	N. Gupta (M.S.), 11/01
T. Millege (M.S.), 11/01	W. Caldwell (M.S.), 11/01	R. Fernandez (M.S.), 11/01
<b>*J. Ding</b> (M.S.), 7/00	<b>* Y. Zhu</b> (M.S.), 7/00	

### Graduates at NDSU

<b>H. Reza</b> (Ph.D.), 4/02	<b>W. Yao</b> (Ph.D.), 4/96	<b>C.Y. Kan</b> (Ph.D.), 4/94
S. Ahmed (M.S.), 7/00	B. Marthi (M.S.), 12/99	W. Wang (M.S.), 12/99
U. Kelda (M.S.), 12/99	Y. Hou (M.S.), 12/99	M. Qin (M.S.), 11/99
Y. He (M.S.), 7/98	T. Al-Rushaid (M.S.), 4/98	S. Zhou (M.S.), 4/98
S. Cong (M.S.), 3/98	M. Chowdhury (M.S.), 8/97	Q. Chen (M.S.), 5/97
X. Zhou (M.S.), 4/97	D. Ingala (M.S.), 4/97	X. Ma (M.S.), 8/96
H. Winands (M.S.), 5/96	X. Tong (M.S.), 5/96	S. Bhaskara (M.S.), 12/95
Q. Wang (M.S.), 12/95	T.B. Mohan (M.S.), 11/95	S. Jayaraman (M.S.), 4/95
S. Barua (M.S.), 12/94	S. Rizwan (M.S.), 12/94	S. Shie (M.S.), 6/94
V. Krishnan (M.S.), 12/93		

Current Graduate Students at FIU: 1 Ph.D. (passed Ph.D. proposal defense)

## PROFESSIONAL HONORS & AWARDS

- Annual Faculty Service Excellence Award, School of Computing and Information Sciences, FIU, 2013.
- Annual Faculty Research Excellence Award, School of Computing and Information Sciences, FIU, 2009.
- Excellence in Faculty Scholarship, FIU, 2008.
- Executive Dean's Award in Service, College of Engineering and Computing, 2006.
- Ranked among the top 15 scholars in Systems and Software Engineering worldwide during 1999 – 2003 by *Journal of Systems and Software*, vol.76, no.1, 2005, 91-97.
- FIU Faculty Award for Excellence in Research, 2005.
- Annual Faculty Service Excellence Award, School of Computing and Information Sciences, FIU, 2005.
- Annual Faculty Teaching Excellence Award, School of Computer Science, FIU, 2003.
- Best Paper Award, The 28<sup>th</sup> International Conference on Software Engineering & Knowledge Engineering, 2017.

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- Best Paper Award, The 11<sup>th</sup> International Conference on Software Engineering & Knowledge Engineering, 1999.
- Who's Who in Information Technology, 1997.
- Who's Who in Science and Engineering, 1995.
- Research Initiation Award, NSF, 1993.
- Who's Who Among Young American Professionals, 1992
- Annual Graduate Student Research Excellence Award, Virginia Tech, 1989
- Epsilon Pi Upsilon, Virginia Tech, 1986.
- European and American Student Association Fellowship, Ministry of Education, China, 1985 – 1986.

## PROFESSIONAL ACTIVITIES

### Editorial Board

- *Transactions on Application and Theory of Petri Nets and Other Concurrency Models*, Springer Verlag.
- *Software Engineering Journal*, International Scholar Research Network.
- *Advances in Software Engineering*, Hindawi Publishing Co.
- *Universal Journal of Software Engineering*, Hindawi Publishing Co.

### Program Committees

- Served on program committees of 8 International Conferences, Symposia, and Workshops in 2019.
- Served on program committees of 7 International Conferences, Symposia, and Workshops in 2018.
- Served on program committees of 5 International Conferences, Symposia, and Workshops in 2017.
- Served on program committees of 5 International Conferences, Symposia, and Workshops in 2016.
- Served on program committees of 5 International Conferences, Symposia, and Workshops in 2015.
- Served on program committees of 4 International Conferences, Symposia, and Workshops in 2014.
- Served on program committees of 6 International Conferences, Symposia, and Workshops in 2013.
- Served on program committees of 8 International Conferences, Symposia, and Workshops in 2012.
- Served on program committees of 8 International Conferences, Symposia, and Workshops in 2011.
- Served on program committees of 10 International Conferences, Symposia, and Workshops in 2010.
- Served on program committees of 10 International Conferences, Symposia, and Workshops in 2009.
- Served on program committees of 10 International Conferences, Symposia, and Workshops in 2008.
- Served on program committees of 12 International Conferences, Symposia, and Workshops in 2007.
- Organizing Chair, 26<sup>th</sup> International Conference of Applications and Theory of Petri Nets (ICATPN), Miami, June, 2005.
- 27<sup>th</sup> International Conference of Applications and Theory of Petri Nets (ICATPN), 2006.
- 16<sup>th</sup> and 17<sup>th</sup> International Conference on Software Engineering and Knowledge Engineering (SEKE), 2005 & 2006.
- ACM / IEEE 8th International Conference on Model Driven Engineering Languages and Systems – Symposium on Education, Jamaica, Oct. 2005,
- International Workshop on Agent-Oriented Software Development Methodologies (AOSDM), 2005 & 2006
- International Workshop on Integration of Software Engineering and Agent Technology (ISEAT), 2006.
- International Conference on Software Engineering Research and Practice (SERP), 2005 & 2006.
- 5<sup>th</sup> & 6<sup>th</sup> International Conference on Quality Software (QSIC), 2005 & 2006.

- 3rd & 4th Workshop on Modeling, Verification, Validation, and Simulation of Enterprise Information Systems, 2005 & 2006.
- 1st – 3rd International Workshop on Quality Assurance and Testing of Web-based Applications, 2004 - 2006
- 25th International Conference of Applications and Theory of Petri Nets (ICATPN), 2004
- 15th IEEE International Conferences on Tools with Artificial Intelligence, 2003.
- IEEE International Conference on Information Reuse and Integration (IRI), 2003 – 2006
- 1st IEEE Multimedia Software Engineering Conference (MSE), 2002
- 16th IFIP World Computer Congress (WCC), 2000
- 20th, 21st, 22nd, 23rd, 24th, 25th Int'l Computer Software and Applications Conf. (COMPSAC), 1996 – 2001.
- 3rd, 5th IEEE High-Assurance Systems Eng. Symp. (HASE), 1998 & 2000.
- Vice Program Chair, 21st Int'l Computer Software and Applications Conf. (COMPSAC'97), 1997.

### **Curricula Committee**

- Member of the Discrete Structure Group of the Joint IEEE Computer Society/ACM Task Force on the "Year 2001 Model Curricula for Computing" (CC-2001), 1998 – 2001.

### **Reviewer**

- National Science Foundation - Software Engineering Division Research Proposals
- ACM Transactions on Software Engineering and Methodology
- Formal Aspects of Computing
- IEEE Transactions on Software Engineering
- IEEE Transactions on Data and Knowledge Engineering
- IEEE Transactions on Parallel and Distributed Systems
- IEEE Transactions on Systems, Man, and Cybernetics
- IEEE Transactions on Robotics and Automation
- International Journal of Foundations of Computer Science
- Information and Software Technology
- Journal of Systems & Software
- Annals of Software Engineering
- The Computer Journal
- International Journal of Software Engineering and Knowledge Engineering
- IEEE Computer
- IEEE Software
- Many international conferences

### **Membership**

- ACM – Senior member
- IEEE Computer Society – Senior member

### **UNIVERSITY SERVICE**

#### **FIU**

- Graduate Committee Chair, School of Computing and Information Sciences, 8/2009 – 8/2019.
- Faculty Search Committee Chair, 2018.
- Human Resource Committee Chair, 8/2015 – 5/2016.
- Human Resource Committee Member, 2010 – 2013, 2016, 2017, 2018, 2019.



- Graduate Program Director, School of Computing and Information Sciences, 8/2006 – 6/2009.
- Director, Center for Advanced Distributed System Engineering, School of Computer Science, 8/2000 – 12/2013.
- College Profession Committee, College of Engineering and Computing, 2005 – 2011.
- Panel reviewer, 2003 FIU Research Foundation Provost's Summer Research Proposal Competition, 2003.
- School of Computer Science Library Committee Representative, College of Arts and Science, 1/2000 – 1/2002.
- Graduate Committee Chair, School of Computer Science, 8/2000 – 8/2006.
- Faculty Recruitment Committee Member, School of Computer Science, 2002 & 2003.
- Computer Science Foundation Area Coordinator, 8/2012 – 8/2015.
- Software Engineering Area Coordinator, New Graduate Course Development, School of Computer Science, 2003 – 2010.
- Coordinator, Undergraduate Software Engineering Area Accreditation, School of Computer Science, 2003.
- Member, Human Resource Committee, School of Computer Science, 2001 – 2002.
- College Library Representative, School of Computer Science, 2000 – 2002.
- Graduate Thesis Committee Member of 20+ Students, School of Computer Science, 2000 – date.
- Ph.D. Qualifying Exam Member of 30+ Students, School of Computer Science, 2000 – date.

#### **NDSU**

- Steering Committee Member, NDSU Cultural Diversity Committee, 1996 – 1999.
- Tenure & Promotion Committee Member, College of Arts & Science, 1997 – 1999.
- Graduate Committee Member, Department of Computer Science, 1990 – 1999.
- Faculty Recruitment Committee Member, Department of Computer Science, 1990 – 1992 & 1995 – 1997.
- Graduate Thesis Committee Member of 50+ Students, Department of Computer Science, 1989 – 1999.