
Academic Positions

- 2012-Present **Assistant Professor**, Northwestern University, Chicago, IL.
2011-2012 **Research Scientist**, University of Florida, Gainesville, FL.

Education

- 2008–2011 **Ph.D., Computer Science**, Washington State University, Pullman, WA.
2006–2008 **MS.c, Computer Science**, Washington State University, Pullman, WA.
2005–2006 **Graduate Studies, Artificial Intelligence**, University of Tehran, Tehran, Iran.
2000–2005 **BS.c, Computer Engineering**, University of Tehran, Tehran, Iran.

Research Interests

Data Mining, Machine Learning, Artificial Intelligence, Ambient Intelligence, Context Aware Computing, Health Informatics.

Journal Articles

- 1 **Parisa Rashidi**, Alex Mihailidis. A Survey on Ambient Assisted Living Tools for Older Adults. *IEEE Transaction on Information Technology in Biomedicine*, 2012.
- 2 Liming Chen, **Parisa Rashidi**. Situation, activity and goal awareness in ubiquitous computing. *International Journal of Pervasive Computing and Communications*, 2012.
- 3 Giovanni Acampora, Diane J. Cook, **Parisa Rashidi**, Thanos Vasilakos. Survey on Ambient Intelligence in Healthcare. *The Proceedings of IEEE*, 2012.
- 4 **Parisa Rashidi**, Diane J. Cook. COM: A Method for Mining and Monitoring Human Activity Patterns for Home-based Health Monitoring Systems. *ACM Transactions on Intelligent Systems and Technology (TIST)*, Special Issue on Intelligent Systems for Health Informatics, 2012.
- 5 Diane J. Cook, Narayanan C. Krishnan, **Parisa Rashidi**. Activity Discovery and Activity Recognition: A New Partnership. *IEEE Transactions on Systems, Man and Cybernetics, Part B (TSMCB)*, 2012.
- 6 **Parisa Rashidi**, Diane J. Cook, Lawrence B. Holder, and Maureen Schmitter-Edgecombe. Discovering activities to recognize and track in a smart environment. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 23(4):527–53, 2011.
- 7 **Parisa Rashidi** and Diane J. Cook. Activity knowledge transfer in smart environments. *Journal of Pervasive and Mobile Computing (PMC)*, Issue 7, pages 331-343, 2011.
- 8 **Parisa Rashidi** and Diane J. Cook. The resident in the loop: Adapting the smart home to the user. *IEEE Transactions on Systems, Man, and Cybernetics journal, Part A*, 39(5):949–959, 2009.

Book Chapters

- 1 **Parisa Rashidi**. *Scalable Unsupervised Techniques for Activity Recognition, Handbook on Plan, Activity, and Intent Recognition*. Elsevier, 2013.
- 2 **Parisa Rashidi**, Narayanan C. Krishnan and Diane J. Cook. *Discovering and tracking patterns of interest in security sensor streams, Securing Cyber-Physical Infrastructures*, chapter 19. Elsevier, 2011.
- 3 **Parisa Rashidi** and Diane J. Cook. *An Adaptive Sensor Mining Framework for Pervasive Computing Applications*, volume 5840 of *Lecture Notes in Computer Science*, pages 154–174. Springer Berlin / Heidelberg, 2008.
- 4 **Parisa Rashidi**, Michael Youngblood, Diane J. Cook, and Sajal Das. *Inhabitant Guidance of Smart Environments*, volume 5840 of *Lecture Notes in Computer Science*, pages 910–919. Springer Berlin / Heidelberg, 2007.

Conference Papers

- 1 **Parisa Rashidi**. Assisted Living Technologies for Older Adults. In *ACM International Health Informatics Symposium (IHI)*, 2012.
- 2 **Parisa Rashidi** and Diane J. Cook. Ask Me Better Questions: Active Learning Queries Based on Rule Induction. In *International Conference on Knowledge Discovery and Data Mining (KDD)*, pages 904–912, 2011.
- 3 **Parisa Rashidi** and Diane J. Cook. Domain Selection and Adaptation in Smart Homes. In *International Conference on Smart Homes and Health Telematics (ICOST)*, Springer-Verlag, Berlin, Heidelberg, pages 17–24, 2011.
- 4 Ehsan Nazarfard, **Parisa Rashidi** and Diane J. Cook. Using Association Rule Mining to Discover Temporal Relations of Daily Activities. In *International Conference on Smart Homes and Health Telematics (ICOST)*, Springer-Verlag, Berlin, Heidelberg, pages 49–56, 2011.
- 5 **Parisa Rashidi** and Diane J. Cook. Mining sensor streams for discovering human activity patterns over time. In *International Conference on Data Mining (ICDM)*, pages 431–440 2010.
- 6 **Parisa Rashidi** and Diane J. Cook. Mining and monitoring patterns of daily routines for assisted living in real world settings. In *ACM International Health Informatics Symposium (IHI)*, pages 336–345, 2010.
- 7 **Parisa Rashidi** and Diane J. Cook. Transferring learned activities in smart environments between different residents. In *International Conference on Intelligent Environments (IE)*, volume 2 of *Ambient Intelligence and Smart Environments*, pages 185–192. Springer-Verlag, 2009.
- 8 **Parisa Rashidi** and Diane J. Cook. Keeping the intelligent environment resident in the loop. In *International Conference on Intelligent Environments (IE)*, pages 1–9, 2008.
- 9 Habib Karbasian and **Parisa Rashidi**. Pbt: Persian part of speech brill tagger. In *IADIS International Conference Applied Computing*, pages 348–352, 2008.
- 10 **Parisa Rashidi**, G. Michael Youngblood, Diane J. Cook, and Sajal K. Das. Inhabitant guidance of smart environments. In *Conference on Human Computer Interaction International (HCII)*, pages 910–919, 2007.

Workshop Papers

- 1 **Parisa Rashidi** and Diane J. Cook. Multi home transfer learning for resident activity discovery and recognition. In *KDD Workshop on Knowledge Discovery from Sensor Data*, 2010.
- 2 **Parisa Rashidi** and Diane J. Cook. Home to home transfer learning. In *AAAI Plan, Activity, and Intent Recognition Workshop*, 2010.
- 3 Ehsan Nazarfard, **Parisa Rashidi**, and Diane J. Cook. Discovering temporal features and relations of activity patterns. In *ICDM Workshop on Data Mining for Service*, 2010.
- 4 **Parisa Rashidi** and Diane J. Cook. An adaptive sensor mining framework for pervasive computing applications. In *KDD Workshop on Knowledge Discovery from Sensor Data*, pages 41–49, 2008.
- 5 **Parisa Rashidi** and Diane J. Cook. Adapting to resident preferences in smart environments. In *AAAI Workshop on Preference Handling*, pages 78–84, 2008.
- 6 **Parisa Rashidi** and Roger T. Alexander. Onspect: ontology based aspects. In *Workshop on Foundations of Aspect-Oriented Languages*, pages 41–41, 2008.

Ph.D Dissertation

Emphasis Data Mining and Machine Learning

Title *Scaling Activity Discovery and Recognition to Large, Complex Datasets*

Advisor Diane J. Cook

Description Introduces novel machine learning and data mining methods for activity recognition based on sequential data mining, stream data mining, active learning, and transfer learning.

Master Thesis

Emphasis Data Mining and Machine Learning

Title *Smart Home Adaptation Based on Explicit and Implicit User Feedback*

Advisor Diane J. Cook

Description Introduces a data mining component for simultaneous discovery of frequent and inexact periodic sequential patterns. A decision making component allows for including implicit and explicit feedbacks into the system using a forgetting mechanism.

Patents

Diane J. Cook, Parisa Rashidi. Systems and Methods for Adaptive Smart Environment Automation. Publication Date 03-11-2010. Application no. 20100063774. Publication Number US 2010/0063774 A1.

Professional Service

NSF Grant NSF CISE, year 2012

Panelist

NSF Grant NSF CISE, year 2011

Panelist

Co-Chair AAAI Symposium on “Gerontechnology and AI”

Chair Situation, Activity, Goal Awareness (SAGAware2012) Workshop in UbiComp 2012 Conference

Instructor NIH m-Health Training Session on Machine Learning 2012
Tutorial Assisted Living Technologies for Older Adults in IHI 2012 Conference
Speaker
Co-Chair Situation, Activity, Goal Awareness (SAGAware2011) Workshop in UbiComp 2011
Conference
Editorial International Journal of Computational Models and Algorithms in Medicine (IJCMAM)
Review Board
Program AAAI Conference on Artificial Intelligence (AI) (AAAI 2013)
Committee
Program ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2012)
Committee
Program IEEE International Conference on Data Mining (ICDM 2012)
Committee
Program IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2009, 2010,
Committee 2011, 2012)
Program IEEE Workshop on Smart Environments (PerCom 2010)
Committee
Reviewer IEEE Transaction on Data and Knowledge Engineering (IEEE TKDE)
Reviewer IEEE Transactions on Systems, Man and Cybernetics (IEEE TSMC)
Reviewer Journal of Pervasive and Mobile Computing (IEEE PMC)
Reviewer Journal of Ambient Intelligence and Smart Environments (JAISE)
Reviewer Conference on Human factors in Computing Science (ACM CHI 2011)
Reviewer Conference on Human factors in Computing Science (ACM CHI 2009)
Reviewer Intelligent Environment Conference (IE 2009)

Teaching

- 2012 **Instructor**, *University of Florida*.
COP 3502, Programming Fundamentals for CIS Majors
- 2008 **Graduate Teaching Assistant**, *Washington State University*.
Machine Learning
- 2008 **Graduate Teaching Assistant**, *Washington State University*.
Advanced Theory of Computation
- 2007–2008 **Graduate Teaching Assistant**, *Washington State University*.
Distributed Systems
- 2007 **Teaching Assistant**, *Washington State University*.
Artificial Intelligence
- 2007 **Teaching Assistant**, *Washington State University*.
Introduction to Automata and Formal Language Theory
- 2006 **Graduate Teaching Assistant**, *Washington State University*.
Neural Networks
- 2006 **Teaching Assistant**, *Washington State University*.
Program Development & Design

2004 **Teaching Assistant**, *University of Tehran*.
Management Information Systems

Industrial Experience

- Summer 2010 **Bosch GmbH (Research and Technology Center)**, WA, US.
Collaborating on Developing a Sequential Data Mining Method
- Summer 2009 **Microsoft Medical Media Labs (M3L)**, DC, US.
Hospital Workflow Automation
- Summer 2008 **Microsoft Research (Robotics Group)**, WA, US.
Human Robot Interface for Assisted Living

Invited Talks

- 2012 Northwestern University, Cognitive Neurology and Alzheimer's Disease Center, IL
- 2012 Florida Institute for Human and Machine Cognition (IHMC), FL
- 2011 Northwestern University, Chicago, IL
- 2011 University of Oregon, Eugene, OR
- 2010 IHI 2012, Miami, FL
- 2010 IHI 2010, Washington DC.
- 2010 KDD 2010, Washington DC.
- 2010 AAAI 2010, Atlanta, GA
- 2008 KDD 2008, Las Vegas, NV

Professional Affiliations

- Member ACM
- Member IEEE
- Member AAAI
- Member AMIA
- Member ACM SIGHIT (Special Interest Group on Health Informatics)
- Member SIGKDD (Special Interest Group on Knowledge Discovery and Data Mining)