

Sepideh Ghanavati

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EDUCATION	Ph.D. in Computer Science , University of Ottawa, Ottawa, ON, Canada	2013
	M.Sc. in System Science , University of Ottawa, Ottawa, ON, Canada	2007
	B.Sc in Industrial and System Engineering , Amirkabir University of Technology, Tehran, Iran	2003
RESEARCH AND PROFESSIONAL EXPERIENCE	Assistant Professor , University of Maine, Orono, ME, USA	2018 – Present
	Director of Privacy Engineering - Regulatory Compliance Lab (PERC_Lab)	
	<ul style="list-style-type: none">• Conducting foundational research and teaching on privacy engineering, cybersecurity, and regulatory-compliance-related topics.• Funded by NSF CAREER Award, Google Faculty Research Award, Google Privacy-related Faculty Award, and UMaine AI Initiative Seed Grant.• Developed and Taught: Introduction to Privacy in Machine Learning; Information Privacy Engineering; Introduction to Cybersecurity; Introduction to Software Engineering.	
	Assistant Professor , Texas Tech University, Lubbock, TX, USA	2016 – 2018
	Director of Privacy Engineering - Regulatory Compliance Lab	
	<ul style="list-style-type: none">• Conducted foundational research and teaching on requirements, software, and privacy engineering as well as legal-compliance-related topics.• Developed and Taught: Engineering Privacy in Software Systems; Software Engineering I & II.	
	Visiting Assistant Professor , Radboud University, Nijmegen, The Netherlands	02/2016 – 07/2016
	Worked with Dr. Jaap-Henk Hopemann	
	<ul style="list-style-type: none">• Conducted research on privacy and software engineering, privacy by design strategies, principle-based enterprise engineering, and argumentation framework for requirements engineering approaches.	
	Visiting Faculty , Carnegie Mellon University, Pittsburgh, PA, USA	02/2015 – 06/2015
	Worked with Dr. Travis Breaux	
	<ul style="list-style-type: none">• Developed a formal ontology for privacy-related regulations in the US and implemented algorithms for comparing the similarities and the differences in the definitions.	
	Postdoctoral Research Fellow , Luxembourg Institute of Science and Technology	01/2014 – 12/2015
	Funded by AFR Grant in Luxembourg - Under the Marie Curie Grant	
	<ul style="list-style-type: none">• Conducted research on the legally compliant goal-oriented framework, multi-jurisdictional compliance framework, principle-based enterprise engineering, and AI-based argumentation frameworks.• <u>PhD Supervision</u>: Diana Marosin, Co-supervisor: Dr. Henderik A. Proper, Area of research: Enterprise Engineering, Goal-oriented Requirements Modeling.	
	Senior Project Manager , e-Dealer, Toronto, ON, Canada	05/2013 – 12/2013
	Managed a team of developers and quality assurance in Bosnia, India, and Canada.	
	Senior Technical Business Analyst , eHealth Ontario, Toronto, ON, Canada	06/2011 – 05/2013
	Part of teams that delivered healthcare information systems that defined business requirements, functional and technical design, and operations deliverables for 11 projects across the Agency.	
	Research Assistant , University of Ottawa, Ottawa, ON, Canada	01/2005 – 04/2013
	Worked with Dr. Daniel Amyot and Dr. Liam Peyton on Business Intelligent Network (BIN) Project.	
	<ul style="list-style-type: none">• Involved in a grant submission, which was awarded \$5 million by NSERC to develop intelligent data management and decision-making solutions.	
	Visiting Researcher , Fondazione Bruno Kessler (FBK), Trento, Italy	02/2010 – 04/2010
	Performed a study on building privacy-compliant business processes and software systems.	

TEACHING EXPERIENCE	<p>Instructor, University of Maine, Orono, ME, USA 2018 – Present</p> <ul style="list-style-type: none"> • <u>Spring 2019 – 2023</u> Introduction to Software Engineering (COS420 & COS520) Introduction to Cybersecurity (COS430 & 530) • <u>Fall 2019 – 2022</u> Information Privacy Engineering (COS435 & 535) Introduction to Private AI – Privacy in Machine Learning (COS475 & 575)
	<p>Guest Lecture, University of Maine, Orono, ME, USA 2018 – Present</p> <ul style="list-style-type: none"> • <u>Fall and Spring 2019, Fall 2020, Spring 2023</u> Capstone Project 1 (COS397) Capstone Project 2 (COS497)
	<p>Guest Lecturer, University of Maine - School of Law - Portland, ME, USA Fall 2022</p> <ul style="list-style-type: none"> • Cybersecurity Law and Policy (LAW 770)
	<p>Instructor, Texas Tech University, Lubbock, TX 2016 – 2018</p> <ul style="list-style-type: none"> • <u>Fall 2016 & Spring 2018:</u> Software Engineering I (CS3365) Software Engineering II (CS4365) • <u>Fall 2017:</u> Computer Science Graduate Seminar (CS5120) • <u>Fall 2016 – 2017:</u> Engineering Privacy in Software Systems (CS4331 & CS5332) • <u>2017-2018:</u> Individual Studies in Computer Science (CS4000) – Undergraduate Elective
	<p>Guest Lecturer, Blekinge Institute of Technology (BTH), Karlskrona, Sweden December 2014</p> <ul style="list-style-type: none"> • <u>Course Title:</u> Legal Requirements Engineering Course <u>Title:</u> Legal- URN Framework - A Legal Compliance Management Framework
	<p>Guest Lecturer, Centre de Recherche Henri Tudor, Luxembourg March 2014</p> <ul style="list-style-type: none"> • <u>Course Title:</u> Requirements Engineering Course (Master’s Level) <u>Title:</u> Introduction to URN and jUCMNav
GRANTS AWARDED	<p>PI: National Science Foundation – 2023 – 2028 CAREER: A Holistic Developer-Centered Approach to Enhance Privacy for Data-Driven Applications <u>Amount:</u> \$674,804</p> <p>PI: Google’s Privacy-related Faculty Award – 2021 – 2022 (Unrestricted Gift) Evaluating Developers’ Privacy Comprehension During Mobile Applications Development Process <u>Amount:</u> \$70,000</p> <p>PI: Google Faculty Award – 2018 – 2019 (Unrestricted Gift) – Acceptance Rate = 14% Privacy Statements’ Recommender System based on Permission Methods of Android Applications <u>Amount:</u> \$32,285</p> <p>PI: UMaine Faculty Research Fund – 2022 Developers’ Privacy Comprehension through Automated Classification of Privacy Behaviors in Software Applications <u>Amount:</u> \$8,000</p> <p>PI: UMaine EMPOWER Mentee Award – 2021 - 2022 Developing AI-Based Privacy Enhancing Techniques for Smart Applications and Smart Devices <u>Amount:</u> \$10,000</p> <p>Co-PI: UMaine AI Initiative – 2020 – 2021 Advancing Legal-Technological Approaches for Protecting Privacy Rights and Civil Liberties in the Age of Big Data PI: Harlan Onsrud, Co-PIs: Chaofan Chen, Sepideh Ghanavati, Manuel Woersdoerfer</p>

Collaborators: Peter Guffin and James Campbell

Amount: \$60,000

PI: NCWIT Main Affiliate – 2021 – 2023

Outreach Activity – NCWIT Aspirations in Computing Affiliate Support Fund

Amount: \$2,400

GRANTS **PI: National Science Foundation** – 2024 – 2027

UNDER REVIEW Collaborative Research: Towards Ethical and Effective AI Governance - Harnessing Natural Language Processing to Bridge the Gap between AI Governance and Development – **Under review - Since January 2024**

Amount: \$133,636

PI: NGI Sargasso – 2024 – 2025

TrustChain - Open Call #3 | F6S: eaturExtractorFutureDecisor – **Under review - Since February 2024**

Amount: \$100,000

OTHER GRANTS	MIT – Fund to attend NSF I-Corps Broadening Participation Summit – \$500	2023
AND AWARDS	University of Maine – Nominated for Faculty Mentorship Award	2022
	Google – Google’s Cloud Platform Credits – \$16,000	2019, 2020, 2023
	UMaine Research – Faculty Travel Fund – \$800	2019
	Bangor Savings Bank/LuRosso – Travel Award – \$2,000	2018
	University of Maine, USA – Startup Package – \$134,780	2018
	Texas Tech University, USA – Startup Package – \$258,576	2016
	National Science Foundation – NSF Support Grant for Junior Researchers – CNS-1257011 – Schloss Dagstuhl – Dagstuhl Seminar 18171, “Normative Multi-Agent Systems” – \$2,000,	2017
	Carnegie Mellon University, USA – Visiting Researcher Support – \$21,000	2015
	Fond Nationale de la Recherche de Luxembourg, Luxembourg – Post-doctoral Marie Curie Grant – 112,000 Euros	2014 – 2015
	OSAP – Ontario Graduate Scholarship – OGS – 15,000 CAD	2011 – 2012
	NSERC, Canada – Canada Graduate Scholarship (CGS-D) – 70,000 CAD	2010 – 2012
	NSERC, Canada – Michael Smiths Foreign Study Supplements Program – 6,000 CAD	2010
	University of Ottawa, Canada – UO Excellence Scholarship – 94,000 CAD	2009 – 2012
	University of Ottawa, Canada – Admission Scholarship – 60,000 CAD	2007 – 2009
	MCeTech Conference – Best Paper Award	2007

REFEREED JOURNAL PUBLICATIONS

[1] D. Amyot, M. Baslyman, S. Ghanavati, M. Ghasemi, J. Hassine, L. Lessard, G. Mussbacher, and E. Yu, Combining Goal modelling with Business Process modelling: Two Decades of Experience with the User Requirements Notation Standard, *Journal of Enterprise Modelling and Information Systems Architectures (EMISAJ)*, Special Issue on 100 Years of Graphical Business Process Modelling, V. 17(2022), Published on 2022-03-17, DOI: <https://doi.org/10.18417/emisa.17.2>.

[2] M. van Zee, F. Bex, and S. Ghanavati, RationalGRL: A Framework for Argumentation and Goal Modeling, *Argument & Computation Journal*, IOS Press, Published, Journal of Argument and Computation, November 2020.

[3] L. Humphreys, G. Boella, L. van der Torre, L. Robaldo, L. Di Caro, S. Ghanavati, and R. Muthuri, Populating Legal Ontologies using Semantic Role Labeling, *Springer Journal of Artificial Intelligence and Law (ARTI)*, Published, June 24th, 2020.

- [4] S. Ghanavati, A. Siena, D. Amyot, A. Perini, L. Peyton, and A. Susi, Integrating Business Strategies with Requirement Models of Legal Compliance, *International Journal of Electronic Business*, Inderscience Publishers, Vol. 8, No. 3, pp 260-280, 2010. DOI: 10.1504/IJEB.2010.034171.
- [5] D. Amyot, S. Ghanavati, J. Horkoff, G. Mussbacher, L. Peyton, and E. Yu, Evaluating Goal Models within the Goal-oriented Requirement Language, *International Journal of Intelligent Systems*, John Wiley & Sons, Vol. 25, No. 8, pp 841-877, 2010. DOI: 10.1002/int.20433.
- [6] A. Pourshahid, P. Chen, D. Amyot, A.J. Forster, S. Ghanavati, L. Peyton, and M. Weiss, Business Process Management with the User Requirements Notation, *Electronic Commerce Research*, Springer, Vol. 9 No. 4, pp 269-316, 2009.
- [7] L. Peyton, S. Ghanavati, and D. Amyot, Designing for Privacy Compliance and Performance Management in Health Care, *Design Principles and Practices: An International Journal*, Vol. 1, Number 3, Common Ground, 2007, 13-25.

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CONFERENCES
AND WORKSHOP
PUBLICATIONS

- [8] S. Santos, T. Breaux, T. Norton, S. Haghghi, and S. Ghanavati, Requirements Satisfiability with In-Context Learning, *Under Review at IEEE RE Conference (RE'24)*
- [9] P. K C, R. Ghandiparsi, S. Ghanavati, R. Slavin, T. D. Breaux and M. Bokaei Hosseini, Toward Regulatory Compliance: A few-shot Learning Approach to Extract Processing Activities, *Under Review at IEEE RENext Conference (RE'24)*
- [10] M. Prybylo, S. Haghghi, S. T. Peddinti, S. Ghanavati, Evaluating Privacy Perceptions, Experience, and Behavior of Software Application Developers, *Under Review at Symposium of Usable Privacy and Security (SOUPS'24)*
- [11] C. Y Su, R. Wallace, J. Gonzalez, V. Jain, S. Ghanavati, and C. McMillan, A Lossless Syntax Tree Generator with Zero-shot Error Correction, *Under Review at ESEC/FSE 2024 Demonstration track*.
- [12] C. Y Su, A. Bansal,, V. Jain, S. Ghanavati, and C. McMillan, A Language Model of Java Methods with Train/Test Deduplication, *ESEC/FSE 2023 Demonstration track*, Accepted, July 20th 2023.
- [13] Z. Delile, S. Radel, J. Godinez, G. Engstrom, T. Brucker, K. Young, and S. Ghanavati, Evaluating Privacy Questions From Stack Overflow: Can ChatGPT Compete?, *ESPRE Workshop at RE Conference 2023*, Accepted, July 8th 2023.
- [14] V. Jain, S. Ghanavati, S. T. Peddinti, and C. McMillan, Towards Fine-Grained Localization of Privacy Behaviors, *In Proceedings of the 8th IEEE European Symposium on Security and Privacy (Euro S&P'23, Delft, July 3-7, 2023. AR = 21%*
- [15] J. Parsons, M. Schrider, O. Ogunlela and S. Ghanavati, Understanding Developers Privacy Concerns Through Reddit Thread Analysis, *In: A. Ferrari, B. Penzenstadler, I. Hadar, S. Oyedeji, S. Abualhaija, A. Vogelsang, G. Deshpande, A. Rachmann, J. Gulden, A. Wohlgemuth, A. Hess, S. Fricker, R. Guizzardi, J. Horkoff, A. Perini, A. Susi, O. Karras, A. Moreira, F. Dalpiaz, P. Spoletini, D. Amyot. Joint Proceedings of REFSQ-2023 Workshops, Doctoral Symposium, Posters & Tools Track, and Journal Early Feedback Track*. Co-located with REFSQ 2023. Barcelona, Spain, April 17, 2023.
- [16] V. Jain, S. D. Gupta, S. Ghanavati, S. T. Peddinti, and C. McMillan, PACT: Detecting and Classifying Privacy Behavior of Android Applications. *In Proceedings of the 15th ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec '22)*, ACM, NY, USA, 104–118, 2022.
- [17] S. D. Gupta, A. Nygaard, S. Kaplan, and S. Ghanavati, A Two-Folded Survey to Understanding the Degree of Sensitivity of the Collected Information in the IoT, *In Proceedings of the Second International Symposium on Emerging Information Security and Applications (EISA 2022)*, 2022.
- [18] S. Kaplan, D. Bulmer, A Gosselin, and S. Ghanavati, Lattice-based Contextual Integrity Analysis of Social Network Privacy Policies, *In the 8th International Workshop on Evolving Security & Privacy Requirements Engineering (ESPRE) at RE 2021*, 2021.
- [19] S.D. Gupta, S., A. Nygaard, S. Kaplan, V. Jain, and S. Ghanavati, PHIN: A Privacy Protected Heterogeneous IoT Network, *In the 15th International Conference on Research Challenges in Information Science (RCIS2021)*, Cyprus, 2021.

- [20] V. Jain, S.D. Gupta, S. Ghanavati, and S.T. Peddinti, PriGen: Towards Automated Translation of Android Applications' Code to Privacy Captions, *In the 15th International Conference on Research Challenges in Information Science (RCIS2021)*, Cypress, 2021.
- [21] L. Humphreys, G. Boella, L. Di Caro, L. Robaldo, L. van der Torre, S. Ghanavati and R. Muthuri, Populating Legal Ontologies using Semantic Role Labeling, *In Proceedings of the 12th Conference on Language Resources and Evaluation (LREC 2020)*, pages 2157-2166, Marseille, France, 11-16 May 2020.
- [22] S. Sartoli, S. Ghanavati, and A. Siami Namin, Towards Variability-Aware Legal-GRL Framework for Modeling Compliance Requirements, *In the 7th International Workshop on Evolving Security & Privacy Requirements Engineering (ESPRES) at RE'20*, Zurich, Switzerland.
- [23] S. Sartoli, S. Ghanavati, and A. Siami Namin, Compliance Requirements Checking in Variable Environments, *In 2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)*, Extended Abstract, 1093-1094, 2020.
- [24] V. Jain and S. Ghanavati, Is It Possible to Preserve Privacy in the Age of AI?, *In Proceedings of the PrivateNLP 2020: Workshop on Privacy in Natural Language Processing - Colocated with WSDM 2020, CEUR Workshop Proceedings*, Pages 32-36, Houston, TX, Feb. 2020.
- [25] S.D. Gupta and Sepideh Ghanavati, Towards a heterogeneous IoT privacy architecture, *In the 35th ACM/SIGAPP Symposium on Applied Computing (SAC '20)*, March 30-April 3, 2020, Brno, Czech Republic, ACM, New York, NY, USA.
- [26] A. Rabinia, S. Ghanavati, L. Humphreys and T. Hahmann, A Methodology for Implementing the Formal Legal-GRL Framework: A Research Preview, *In the 26th International Working Conference on Requirements Engineering: Foundation for Software Quality*, pp 124-131, Pisa, Italy, 23-26 June 2020.
- [27] A. Rabinia, M. Dragoni, and S. Ghanavati, Towards Integrating the FLG Framework with the NLP Combinatory Framework, *In Proceedings of the PAL: Privacy-Enhancing Artificial Intelligence and Language Technologies, As Part of the AAAI Spring Symposium Series (AAAI-SSS 2019)*, Palo Alto, USA, March 25-27, 2019.
- [28] S. Maitra, B.Suh and S. Ghanavati, Privacy Consistency Analyzer for Android Applications, *In Proceeding of the 5th International Workshop on Evolving Security & Privacy Requirements Engineering (ESPRES'18) in conjunction with RE'18*, Banff, Canada, August 2018.
- [29] A. Rabinia and S. Ghanavati, The FOL-based Legal-GRL (FLG) Framework: Towards an Automated Goal Modeling Approach for Regulations, *In Proceedings of the Eighth International Model-Driven Requirements Engineering (MoDRE'18) workshop in conjunction with RE'18*, Banff, Canada, August 2018.
- [30] A. K. Massey, E. Holtgreffe and S. Ghanavati, Modeling Regulatory Ambiguities for Requirements Analysis, *In Proceeding of the 36th International Conference on Conceptual Modeling (ER'17)*, Spain, November 2017, **AR = 25%**.
- [31] P. Shayegh and S. Ghanavati, Toward an Approach to Privacy Notices in IoT, *In Proceeding of the 4th International Workshop on Evolving Security & Privacy Requirements Engineering (ESPRES'17)*, Lisbon, Portugal, September 2017.
- [32] A. Rabinia, and S. Ghanavati, FOL-based Approach for Improving Legal-GRL Modeling Framework - A Case for Requirements Engineering of Legal Regulations of Social Media, *In Proceeding of the 10th International Requirements Engineering and Law Workshop (RELAW'17)*, Lisbon, Portugal, September 2017.
- [33] S. Ghanavati, M. van Zee, and F. Bex, Argumentation-based Methodology for Goal-oriented Requirements Language (GRL), *In Proceeding of the 10th International iStar Workshop (iStar'17)*, Essen, Germany, June 2017.

- [34] D. Marosin, and S. Ghanavati, Semi-formal Evaluation of Architecture Design Based on Architecture Principles, *In Proceeding of the 10th International iStar Workshop (iStar'17)*, Essen, Germany, June 2017.
- [35] M. van Zee, D. Marosin, F. Bex, and S. Ghanavati, RationalGRL: A Framework for Rationalizing Goal Models from Argument Graphs, *In Proceeding of the 35th International Conference on Conceptual Modeling (ER'16)*, Gifu, Japan, November 2016.
- [36] M. Colesky and S. Ghanavati, Privacy Shielding by Design - A Strategies Case for Near-Compliance, *In the 9th IEEE International Workshop on Requirements Engineering and Law (RELAW'16)*, Beijing, China, September 2016.
- [37] M. van Zee, D. Marosin, Bex, F. and S. Ghanavati, The RationalGRL toolset for Goal Models and Argument Diagrams, *In Proceeding of the 6th International Conference on Computational Models of Argument (COMMA'16) as a DEMO ABSTRACT*, Extended Abstract, Potsdam, Germany, September 2016.
- [38] D. Marosin, M. van Zee, and S. Ghanavati, Formalizing and Modeling Enterprise Architecture (EA) Principles with Goal-oriented Requirements Language (GRL), *In Proceedings of the 28th International Conference on Advanced Information System Engineering (CAiSE16)*, Slovenia, June 2016. **AR = 16%**
- [39] S. Ghanavati, and T.D. Breaux, Comparing and Analyzing Definitions in Multi-Jurisdictions, *In the 8th IEEE International Workshop on Requirements Engineering and Law (RELAW'15)*, August 2015, Ottawa, Canada.
- [40] D. Marosin, and S. Ghanavati, Measuring and Managing the Design Restriction of Enterprise Architecture (EA) Principles on EA models, *In the 8th IEEE International Workshop on Requirements Engineering and Law (RELAW'15)*, Ottawa, Canada, 2015.
- [41] M. van Zee, F. Bex, and S. Ghanavati, Rationalization of Goal Models in GRL using Formal Argumentation, *In RENext! @ 23rd International IEEE Requirements Engineering Conference (RE'15)*, Ottawa, Canada, August 2015.
- [42] L. Humphreys, G. Boella, L. Robaldo, L. Di Caro, L. Cupi, S. Ghanavati, R. Muthuri, and L. Van der Torre, Classifying and Extracting Elements of Norms for Ontology Population using Semantic Role Labelling, *In 2015 Workshop on Automated Detection, Extraction and Analysis of Semantic Information in Legal Texts in Conjunction to ICAIL'15*, San Diego, US, 2015.
- [43] S. Ghanavati and J. Hulstijn, Impact of Legal Interpretation in Business Process Compliance, *In TELERISE'15 Workshop*, In ICSE'15 Workshop, Italy, 2015.
- [44] M. van Zee and S. Ghanavati, Capturing Evidence and Rationales with Requirements Engineering and Argumentation-Based Techniques, *In the 26th BENELUX Conference ON Artificial Intelligence (BNAIC'14)*, Nijmegen, Netherlands, 2014.
- [45] S. Ghanavati, S. Ingolfo, and A. Siena, Exploring Legal Business Process Alternatives, *In the 7th IFIP WG 8.1 working conference on the Practice of Enterprise Modelling (POEM'14)*, Manchester, UK, 2014.
- [46] S. Ghanavati, R. Muthuri, A. Rifaut, L. Humphreys, and G. Boella, The Role of Power in Legal Compliance, *In the 7th Int. Workshop on Requirements Engineering and Law (RELAW)*, Karlskrona, Sweden, Extended Abstract, 2014.
- [47] S. Ghanavati, L. Humphreys, G. Boella, L. Di Caro, L. Robaldo, and L. van der Torre, Business Process Compliance with Multiple Regulations, *In Proceeding of the 33rd International Conference on Conceptual Modeling (ER'14)*, USA, 2014.
- [48] S. Ghanavati, D. Amyot, A. Rifaut, and E. Dubois, Goal-Oriented Compliance with Multiple Regulations, *In the 22nd IEEE International Requirements Engineering Conference (RE'14)*, Karlskrona, Sweden, 2014, **AR = 26%**.

- [49] D. Marosin, S. Ghanavati, and D. van der Linden, A Principle-based Goal-oriented Requirements Language (GRL) for Enterprise Architecture, *In the 7th International i* Workshop (iStar'14)*, Thessaloniki, Greece, In conjunction with CAiSE'14, 2014.
- [50] G. Boella, S. Colombo Tosatto, S. Ghanavati, J. Hulstijn, L. Humphreys, R. Muthuri, A. Rifaut, and L. van der Torre, Integrating Legal-URN and Eunomos: Towards a Comprehensive Compliance Management Solution, *In Proceeding of Artificial Intelligence and the Complexity of Legal Systems (AICOL)*, 2014.
- [51] S. Ghanavati, D. Amyot, and A. Rifaut, Legal Goal-oriented Requirement Language (Legal GRL) for Modeling Regulations, *In Workshop on Modeling in Software Engineering @ICSE2014 (MiSE)*, Hyderabad, India, 2014.
- [52] A. Rifaut and S. Ghanavati, Measurement-Oriented Comparison of Multiple Regulations with GRL, *In the 5th Int. Workshop on Requirements Engineering and Law (RELAW)*, Chicago, USA, September 2012.
- [53] S. Ghanavati, D. Amyot and L. Peyton, A Systematic Review of Goal-oriented Requirements Management Frameworks for Business Process Compliance, *In the 4th Int. Workshop on Requirements Engineering and Law (RELAW)*, Trento, Italy, August 2011.
- [54] D. Amyot, G. Mussbacher, S. Ghanavati, and J. Kealey, GRL Modeling and Analysis with jUCMNav, *In the 5th Int. i* Workshop*, Trento, Italy, August 2011.
- [55] S. Ghanavati, A. Siena, D. Amyot, A. Susi, and A. Perini, Towards a Framework for Business Process Compliance, *In the International Workshop on Goal-based Business Process Engineering (WGBP'10)*, Vitoria, ES, Brazil, October 2010.
- [56] S. Ghanavati, A. Siena, D. Amyot, D., A. Susi, and A. Perini, Making Business Processes Law-Compliant, *In the First Workshop on Law Compliancy Issues in Organisational Systems and Strategies (iComply'10)*, Fiesole, Firenze, Italy, July 2010.
- [57] S. Ghanavati, D. Amyot and L. Peyton, Compliance Analysis Based on a Goal-oriented Requirement Language Evaluation Methodology, *In the 17th IEEE International Requirements Engineering Conference (RE'09)*, Atlanta, USA, September 2009. IEEE CS, 133-142. **AR = 21%**.
- [58] S. Ghanavati, A. Siena, A. Perini, D. Amyot, L. Peyton, and A. Susi, A Legal Perspective on Business: Modeling the Impact of Law, *In the 4th International MCEtech Conference on eTechnologies*, Canada, May. LNBIP, Springer, 267-278, 2009.
- [59] G. Mussbacher, S. Ghanavati, and D. Amyot, Modeling and Analysis of URN Goals and Scenarios with jUCMNav, *In Research demo at the 17th IEEE International Requirements Engineering Conference (RE'09)*, Atlanta, USA, September 2009. Short paper also published by IEEE CS.
- [60] S. Ghanavati, D. Amyot and L. Peyton, Comparative Analysis between Document-based and Model-based Compliance Management Approaches, *In the First Int. Workshop on Requirements Engineering and Law (RELAW 2008)*, Barcelona, Spain, September. IEEE, 35-39, 2008.
- [61] A. Pourshahid, P. Chen, D. Amyot, D., A.J. Forster, S. Ghanavati, L. Peyton, and M. Weiss, Toward an integrated User Requirements Notation framework and tool for Business Process Management, *In the 3rd Int. MCEtech Conference on eTechnologies*, Montréal, Canada, January 2008. IEEE Computer Society, 3-15. **(Best Paper Award)**.
- [62] S. Ghanavati, D. Amyot and L. Peyton, Towards a Framework for Tracking Legal Compliance in Healthcare, *In the 19th Int. Conf. on Advanced Information Systems Engineering (CAiSE'07)*, Trondheim, Norway, June. LNCS 4495, Springer, 218-232, 2007, **AR = 13%**.
- [63] S. Ghanavati, D. Amyot and L. Peyton, A Requirements Management Framework for Privacy Compliance, *In Proceedings of the 10th Workshop on Requirements Engineering (WER'07)*, Toronto, Canada, 149-159.

BOOK
CHAPTERS

- [64] D. Marosin and S. Ghanavati, Steering Transformations with Architecture Principles, *In: H. A. Proper, R. Winter, S. Aier and S. de Kinderen (Eds), Architectural Coordination of Enterprise Transformation*, Springer LNCS, Page 147-151, 2017.
- [65] D. Marosin and S. Ghanavati, Principle-Based Goal-Oriented Requirements Language, *In: H. A. Proper, R. Winter, S. Aier and S. de Kinderen (Eds), Architectural Coordination of Enterprise Transformation*, Springer LNCS, Page 235-247, 2017.
- [66] A. Pourshahid, L. Peyton, S. Ghanavati, D. Amyot, P. Chen, and M. Weiss, Model-Based Validation of Business Processes. *In: V. Shankararaman, J.L. Zhao and J.K. Lee (Eds), Business Enterprise, Process, and Technology Management: Models and Applications*, Business Science Reference, IGI Global, USA, pp. 165-183, 2012. DOI: 10.4018/978-1-46660-249-6.

EDITED
VOLUMES

- [67] H. Hibshi, D. Ki-Aries, S. W. Lee, M. Salnitri, R. Ali, A. Atzeni, Sh. Faily, R. Gandhi, S. Ghanavati, Jane Henrikson-Bulmer, Christos Kalloniatis, Tong Li, Raimundas Matulevicius, N. Mead, M. Ochoa, F. Paci, J. Park, A. Pasic, H. Schmidt, I. Singh, R. Slavin, N. Zannone, *the Ninth International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE'22), 30th IEEE International Requirements Engineering Conference Workshops*, REW October 2022.
- [68] O. Feyisetan, S. Ghanavati, P. Thaine, F. Mireshghallah, I. Habernal, *Proceedings of the Third Workshop on Privacy in NLP, As Part of 2022 The Association for Computational Linguistics, NAACL'2022 Conference*, July 2022.
- [69] S. Ghanavati, N. Niu, G. Mussbacher, J. Araujo, P. Sanchez, *The 11th International Model-Driven Requirements Engineering (MoDRE) workshop at RE'21*.
- [70] O. Feyisetan, S. Ghanavati, Sh. Malmasi, P. Thaine, *Proceedings of the Third Workshop on Privacy in NLP, As Part of 2021 The Association for Computational Linguistics, NAACL'2021 Conference*, 2021.
- [71] O. Feyisetan, S. Ghanavati, Sh. Malmasi, P. Thaine, *Proceedings of the Second Workshop on Privacy in NLP, As Part of The Association for Computational Linguistics, EMNLP 2020 Conference*, 2020.
- [72] O. Feyisetan, S. Ghanavati, O. Rokhlenko, P. Thaine, *Proceeding of Workshop on Privacy in NLP (PrivateNLP 2020), As Part of the 13th International Conference on Web Search and Data Mining (WSDM'20)*, CEUR Workshop Proceedings, Vol-2573, Houston, USA.
- [73] S. Wilson, S. Ghanavati, K. Ghazinour, N. Sadeh, Privacy-Enhancing Artificial Intelligence and Language Technologies (PAL 2019), *Proceedings of the PAL: Privacy-Enhancing Artificial Intelligence and Language Technologies As Part of the AAAI Spring Symposium Series (AAAI-SSS 2019)*, CEUR Workshop Proceedings, Volume 2335, Palo Alto, USA, March 25-27, 2019.
- [74] S. Ghanavati, L. Liu, and L. López, *Proceedings of the 10th International i* Workshop, co-located with the 29th International Conference on Advanced Information Systems Engineering (CAiSE 2017)*, CEUR Workshop Proceedings, Volume 1829, Essen, Germany, June 12-13, 2017.

NON-ARCHIVAL
PAPERS

- [75] S. Kaplan, D. Bulmer, A Gosselin, S. Ghanavati, Lattice-based Contextual Integrity Analysis of Social Network Privacy Policies, *The 3rd Annual Symposium on Applications Of Contextual Integrity*, Chicago, IL, CI Talk, September 2021.
- [76] O. Feyisetan, S. Ghanavati, P. Thaine, Workshop on Privacy in NLP (PrivateNLP 2020), *WSDM '20: Proceedings of the 13th International Conference on Web Search and Data Mining*, January, Pages 903–904, 2020.
- [77] A. Rabinia, D. Nathan, S. Ghanavati, Contextual Integrity and Reasonable Expectations: A Privacy Paradigm, *The 2nd Annual Symposium on Applications Of Contextual Integrity*, Berkeley, CA, CI Talk, August 2019.
- [78] S. Ghanavati, D. Amyot, L. Peyton, and G. Mussbacher, A Compliance Framework for Business Processes Based on URN and DOORS, *Telelogic User Group Conference*, Atlanta, USA, 2007.

- REFEREED & INVITED TUTORIALS
- [79] S. Ghanavati, I. Habernal, F. Miresghallah, P. Thaine, and O. Feyisetan, Tutorial on Privacy-Preserving Natural Language Processing, *In the 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL'23)*, Dubrovnik, Croatia, May 6, 2023.
 - [80] S. Ghanavati, D. Marosin, and M. van Zee, Tutorial on Business Process Compliance Analysis: A Graphical Representation with Tool Support, *In the 23rd IEEE Int. Requirements Engineering Conf. (RE'15)*, Ottawa, Canada, August 2015.
 - [81] S. Ghanavati, D. Marosin and M. van Zee, Tutorial on Business Process Compliance Analysis: A Graphical Representation with Tool Support, *Luxembourg Institute of Science and Technology*, Luxembourg, November 2015.
 - [82] S. Ghanavati, Gunter Mussbacher, Alireza Pourshahid and Azalia Shamsaei, Tutorial on the User Requirements Notation (URN) for Business Process Modeling and Legal Compliance, *In the 19th IEEE Int. Requirements Engineering Conf. (RE'11)*, Trento, Italy, August 2011.
- SELECTED REFEREED POSTERS
- [83] J. Parsons, M. Schrider, O. Ogunlela, S. Ghanavati, Understanding Developers Privacy Concerns Through Reddit Thread Analysis, *Maine Students Symposium (UMSS'23)*, April 2023.
 - [84] D. Bulmer, V. Jain, S. Ghanavati, Towards Automated Classification of Privacy Behaviors in Mobile Applications, *The State of Maine AI*, January 2023.
 - [85] Maxwell Prybylo, V. Jain, S. Ghanavati, PriCon: A Privacy Conscious System, Poster Presentation, *UMaine Student Symposium (UMSS'22)*, April 2022.
 - [86] S. Datta Gupta, S. Ghanavati, Protecting Privacy in the Heterogeneous Internet of Things, Poster Presentation, *UMaine Student Symposium (UMSS'21)*, April 16th, 2021.
 - [87] Vijayanta Jain, S. Ghanavati, What Personal Information is Your App Collecting, Poster Presentation, *UMaine Student Symposium (UMSS'21)*, April 16th, 2021.
 - [88] A. Rabinia, M. Dragoni, S. Ghanavati, Towards Integrating the FLG Framework with the NLP Combinatory Framework, *Proceedings of the PAL: Privacy-Enhancing Artificial Intelligence and Language Technologies, As Part of the AAAI Spring Symposium Series (AAAI-SSS 2019)*, Poster Presented, Palo Alto, USA, March 25-27, 2019.
- TECHNICAL REPORTS
- [89] S. D. Gupta, S. Ghanavati, Privacy in the Internet of Things: Where do We Stand? A Systematic Literature Review, *TechRxiv. Preprint*, , 2022.
 - [90] P. Shayegh, V. Jain, A. Rabinia, and S. Ghanavati, Automated Approach to Improve IoT Privacy Policies, *Technical Report*, arXiv preprint arXiv:1910.04133, 2019.
- THESIS
- [91] S. Ghanavati, Legal-URN framework for legal compliance of business processes, *Ph.D. thesis*, University of Ottawa, Canada, 2013.
 - [92] S. Ghanavati, A Compliance Framework for Business Processes Based on URN, *MSc. thesis*, University of Ottawa, Canada, 2007.
- CONTRIBUTION TO STANDARD
- Developed GRL Analysis Algorithms of ITU-T, Recommendation Z.151 (10/12): User Requirements Notation (URN) - Language Definition, Geneva, Switzerland, approved October 2012
Co-editors: Daniel Amyot and Gunter Mussbacher.
- TOOLS AND SOFTWARE
- Jam:** A Language Model of Java Methods, C. Y Su, A. Bansal, V. Jain, S. Ghanavati, and C. McMillan, <https://github.com/apcl-research/jam>
- Fine Grained Localization:** Code, dataset, and training script to detect and localize privacy behaviors in mobile applications, V. Jain, S. Ghanavati, S.T. Peddinti, and C. McMillan, https://github.com/PERC-Lab/Fine_Grained_Localization
- PDroid:** A static analysis tool to extract the privacy practices of Android applications, V Jain and S. Ghanavati, <https://github.com/PERC-Lab/PDroid>

Codr: An open-source research tool to annotate code segments based on privacy predefined labels, D. Bulmer, V Jain and S. Ghanavati, https://perc_lab.codrjs.com/

Play Crawler: An open-source tool that crawls the Play Store, generating a JSON object representation of each app, D. Bulmer, S. Kaplan, A. Green, and S. Ghanavati, <https://github.com/PERC-Lab/Play-Crawler>

INVITED TALKS & PANELS	Keynote Speaker, The 10th ESPRE'23 Workshop <i>The 10th International Workshop on Evolving Security & Privacy Requirements Engineering</i> Privacy is not an Afterthought: Raising Awareness Towards Privacy-Driven Software Development	September 2023
	Invited Faculty Talk, Google, Virtual A Holistic Automated Approach to Enhance Applications' Privacy	April 2023
	Invited Speaker, UMaine BOT Event A Holistic Developer-Centered Approach to Enhance Privacy for Data-Driven Applications	March 2023
	Invited Panelist: ACM-W, Virtual ACM-W Celebrating Technology Leaders: Women in Cybersecurity	June 2021
	Invited Panelist: Center for Criminal Justice, Intelligence & Cybersecurity at SUNY Crazy Life with a Connected Device Cybersecurity Conference	October 2020
	Invited Panelist: Synthetic Intelligence Forum, Toronto, ON, Canada Privacy and AI Panel	August 2020
	Invited Speaker: GISE'20 Workshop @ICSE'20 Conference, Virtual Privacy Compliance Challenges and Opportunities for Smart Applications	July 2020
	Invited Speaker: PERC Lab Research, AI Initiative at UMaine Automated Translation of Permission-Requiring Code to Privacy Statements	March 2020
	Invited Speaker: IEEE Maine Communications and Computer Societies Chapter A Privacy-Compliant Framework for Mobile and Smart Applications	November 2019
	Invited Google Tech Talk: Google, Sunnyvale, USA Privacy Engineering Framework for Software, Mobile and Smart Applications	March 2019
	Invited Talk: Texas Tech University, USA Multi-jurisdictional Privacy Compliance in IoT era	November 2016
	Invited Talk: Department of Informatic, University of Hamburg, Germany Multi-jurisdictional Legal Compliance	September 2015
	Invited Talk: Centre of Security and Trust (SnT), Luxembourg Legal - URN Framework - A Method for Business Process Compliance	January 2015
	Invited Talk: University of Toronto, Toronto, Canada Legal- URN Framework for Privacy Compliance	October 2014
	Invited Talk: Normative Multi-Agent Systems: NorMAS 2014, Bertinoro, Italy Legal- URN Framework for Privacy Compliance	September 2014
	Invited Talk: Bournemouth University, UK Legal- URN Framework for Privacy Compliance	May 2014
	Invited Talk: Centre de Recherche Henri Tudor, Luxembourg Legal- User Requirements Notation Framework for Business Process Compliance	February 2014
	Invited Talk: Fondazione Bruno Kessler (FBK), Trento, Italy Goal-oriented Legal Compliance: A Lightweight URN Profile	March 2010

MENTORED **V. Jain: Euro S&P 2023** 2023
 PRESENTATIONS Towards Fine-Grained Localization of Privacy Behaviors **Conference Presentation**
S.D. Gupta: CRA-WP Grad Cohort for Women 2021
 Protection of Privacy in the Internet of Things
V. Jain: Student Research Workshop at ACL-IJCNLP 2021
 Student Research Workshop at 11th ACL International Joint Conference on Natural Language Processing
 (ACL-IJCNLP) Helping Developers Create Consistent Privacy Notices for Android Applications
V. Jain: The IEEE S&P 2020 2020
 Translating Code to Privacy Statements **Best Short Talk**
V. Jain: The University of Maine iLunch Seminar Series 2020
 Translating Code to Privacy Statements

INVITED GRANT **Panel Member**, AAUW CDG STEM: 2024.

PROPOSAL **Panel Member**, National Science Foundation, CISE Directorates: 2023, 2022, 2021, 2018.

REVIEWERS **Reviewer**, German National Research Center for Applied Cybersecurity ATHENE, September 2023 and 2022.

Reviewer, Veni research proposal Dutch Research Council, The Netherlands, 2021.

Reviewer, The Center for Cyber Law & Policy, Haifa, Israel, 2017.

INVITED **Editorial Board**, Proceedings of the Privacy Enhancing Technology, since 2023.

JOURNAL **Book Reviewer**, Cambridge University Press, 2022.

REVIEWER **Reviewer**, ELSEVIER Information and Software Technology (IST), since 2023.

Reviewer, IEEE Transaction on Software Engineering (TSE), since 2019.

Reviewer, ACM Transactions on Software Engineering and Methodology (TOSEM), since 2018.

Reviewer, Journal of Software & Systems Modeling (SoSym), Springer, since 2018.

Reviewer, Journal of Artificial Intelligence and Law, Springer, 2018.

Reviewer, Journal of Systems and Software (JSS), Elsevier, since 2017.

Reviewer, Empirical Software Engineering Journal (EMSE), Springer, since 2016.

Reviewer, IEEE Software, IEEE Computing Society, since 2016.

Reviewer, Software Quality Journal, Springer, since 2015.

Reviewer, International Journal on Software Tools for Technology Transfer (STTT), Springer, 2014 – 2015.

Reviewer, IEEE Requirements Engineering Journal (REJ), since 2014.

ORGANIZING Organizing Co-Chair, Poster & Tools Demos track, the 32nd IEEE International Requirements Engineer-
 COMMITTEE ing Conference (RE'24), Iceland, 2024.

Organizing Co-Chair, the 5th Workshop on Privacy in Natural Language Processing (PrivateNLP'24)
 Co-located with ACL 2024, August 2024.

Organizing Co-Chair, the 11th Workshop on the Evolving Security and Privacy Requirements Engineer-
 ing (ESPRE) Co-located with RE'24, Iceland, June 2024.

Organizing Co-Chair, the 7th Workshop on Natural Language Processing for Requirements Engineering
 Co-located with REFSQ'24, Spain, April 2024.

Organizing Co-Chair, the 4th Workshop on Privacy in Natural Language Processing (PrivateNLP'22)
 Co-located with NAACL 2022, Virtual, June 2022.

Proceeding Co-Chair, the 29th IEEE International Requirements Engineering Conference (RE'21), USA,
 2021.

Workshop Co-Chair, The 27th Working Conference on Requirements Engineering, Foundation for Soft-
 ware Quality, 2021.

Organizing Co-Chair, the 3rd Workshop on Privacy in Natural Language Processing (PrivateNLP'21)
 Co-located with NAACL 2021, Virtual, June 2021.

Organizing Co-Chair, the 11th International Model-Driven Requirements Engineering (MoDRE), co-located with RE'21, USA, 2021.

Workshop Co-Chair, the 28th IEEE International Requirements Engineering Conference (RE'20), Switzerland, 2020.

Organizing Co-Chair, PrivateNLP 2020: The First Workshop on Privacy in NLP, Co-located with the Conference on Empirical Methods in Natural Language Processing 2020 (EMNLP'20), Dominican Republic, November 8 – 12, 2020.

Organizing Co-Chair, Workshop on Privacy and Natural Language Processing Co-located with WSDM 2020, Feb 7, 2020, Houston Texas.

Proceeding Co-Chair, the 27th IEEE International Requirements Engineering Conference (RE'19), South Korea, 2019.

Organizing Co-Chair, AAAI Spring Symposium - PAL: Privacy-Enhancing Artificial Intelligence and Language Technologies, Stanford University - Palo Alto, California, March 25-27, 2019.

Proceeding Co-Chair, the 26th IEEE International Requirements Engineering Conference (RE'18), Banff, Canada, 2018.

Organizing Co-Chair, A panel on Big Data, Privacy and Ethics with Dr. Manuel Wörsdörfer and Dr. Peer Zumbansen, at Transnational Law Summit 2018, King's College London, UK, 2018.

Organizing Co-Chair, the 10th International Workshop on Requirements Engineering and Law (RELAW'17), Lisbon, Portugal, 2017.

Organizing Co-Chair, The 10th International i* (iStar) Workshop, Essen, Germany, 2017.

Program Co-Chair, the 9th International Workshop on Requirements Engineering and Law (RELAW'16), Beijing, China, 2016.

Program Co-Chair, the 8th International Workshop on Requirements Engineering and Law (RELAW'15), Ottawa, Canada, 2015.

Organizing Co-Chair, Posters, Demos and Exhibits Co-Chair - at the 23rd International Requirements Engineering Conference (RE'15), Ottawa, Canada, 2015.

PROGRAM
COMMITTEE

Program Committee, the 32nd IEEE International Conference on Requirements Engineering (RE'24), Germany, September 2024.

Program Committee, the Proceedings on Privacy Enhancing Technologies (PETS'24).

Program Committee, the 46th International Conference on Software Engineering (ICSE 2024) – research track, Lisbon, Portugal.

Program Committee, the Software Engineering Education and Training (SEET) Track at the 46th International Conference on Software Engineering (ICSE 2024), Lisbon, Portugal, 2024.

Program Committee, the Proceedings on Privacy Enhancing Technologies (PETS'23) – Artifacts Track.

Program Committee, the Software Engineering Education and Training (SEET) Track at the 45th International Conference on Software Engineering (ICSE 2023), Melbourne, Australia.

Program Committee, The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), ESEC/FSE '23, 2023.

Program Committee, ACM/IEEE 26th International Conference on Model Driven Engineering Languages and Systems (Practices and Innovation Tracks, Sweden, October 2023).

Program Committee, the 31st IEEE International Conference on Requirements Engineering (RE'23), Germany, September 2023.

Program Committee, the 10th International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE'23), co-located with RE'23, Germany, September 2023.

Program Committee, the 13th International Model-Driven Requirements Engineering (MoDRE'23), co-located with RE'23, Germany, September 2023.

Program Committee, Workshop on Empirical Methods in Conceptual Modeling (EmpRE'23), co-located with ER'23, Lisbon, Portugal, November 2023.

Program Committee, the 6th International Workshop on Natural Language Processing for Requirements Engineering (NLP4RE'23), Valencia, Spain, April 2023.

Program Committee, Graph Models for Learning and Recognition, at the 38th Annual ACM Symposium on Applied Computing (SAC-2023), 2023.

Program Committee, Students Research Track, at the 38th Annual ACM Symposium on Applied Computing (SAC-2023), 2023.

Program Committee, The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), ESEC/FSE '22 Artifacts, 2022.

Program Committee, The 37th IEEE/ACM International Conference on Automated Software Engineering Artifact Evaluation, ASE 2022 Artifact Evaluation, 2022.

Program Committee, ACM/IEEE 25th International Conference on Model Driven Engineering Languages and Systems (Practices and Innovation Tracks, Canada, October 2022).

Program Committee, the 30th IEEE International Conference on Requirements Engineering, Virtual, August 15 – 19, 2022.

Program Committee, the 5th International Workshop on Natural Language Processing for Requirements Engineering (NLP4RE'22), Birmingham, UK, March 2022.

Program Committee, the International Workshop on Artificial Intelligence and Requirements Engineering (AIRE'22), co-located with RE'22, Virtual, 2022.

Program Committee, the 9th International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE'22), co-located with RE'22, Virtual, 2022.

Program Committee, the 12th International Model-Driven Requirements Engineering (MoDRE), co-located with RE'22, Virtual, 2022.

Program Committee, the Software Engineering Education and Training (SEET) Track at the 44th International Conference on Software Engineering (ICSE 2022), Pittsburgh, USA.

Program Committee, the 20th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER'22), Early Research Achievement Track, 2022.

Program Committee, Graph Models for Learning and Recognition, at the 37th Annual ACM Symposium on Applied Computing (SAC-2022), 2022.

Program Committee, Special Track on Internet of Things (IoT), at the 37th Annual ACM Symposium on Applied Computing (SAC-2022), 2022.

Program Committee, Requirements Engineering Track, 15th Edition at the 37th Annual ACM Symposium on Applied Computing (SAC-2022), 2022.

Program Committee, ACM/IEEE 24th International Conference on Model Driven Engineering Languages and Systems (MODELS) – Practice and Innovation Track, Virtual, 2021.

Program Committee, the 29th IEEE International Requirements Engineering Conference (RENext!'21), Indiana, USA, 2021.

Program Committee, The 36th IEEE/ACM International Conference on Automated Software Engineering Artifact Evaluation, ASE 2021 Artifact Evaluation, 2021.

Program Committee, The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), ESEC/FSE '21 Artifacts, 2021.

Program Committee, the 29th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER'21), Early Research Achievement Track, 2021.

Program Committee, the 27th Intl. Working Conference on Requirements Engineering: Foundations for Software Quality (REFSQ'21), Essen, Germany, 2021.

Program Committee, Special Track on Internet of Things (IoT), at the 36th Annual ACM Symposium on Applied Computing (SAC-2021), Korea, 2021.

Program Committee, Requirements Engineering Track, 14th Edition at the 36th Annual ACM Symposium on Applied Computing (SAC-2021), Korea, 2021.

Program Committee, the 8th International Workshop on Evolving Security & Privacy Requirements Engineering at RE'21, USA, 2021.

Program Committee, the 2nd Workshop on Ethics in Requirements Engineering Research and Practice at ICSE2021, Virtual, 2021.

Shadow PC, the 2021 Mining Software Repository (MSR'21), Co-Located with ICSE'21, 2021.

Program Committee, the Natural Language Processing for Requirements Engineering Workshop (NLP4RE) 2021 at REFSQ'21, 2021.

Program Committee, the 28th IEEE International Requirements Engineering Conference (RENext!'20), Switzerland, 2020.

Program Committee, the 27th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER'20), Early Research Achievement Track, London, Ontario, February 18 – 21 2020.

Program Committee, the 26th Intl. Working Conference on Requirements Engineering: Foundations for Software Quality (REFSQ'20), Pisa, Italy, March 2020.

Program Committee, Special Track on Internet of Things (IoT), at the 35th Annual ACM Symposium on Applied Computing (SAC-2020), Brno, Czech Republic, March 30-April 3, 2020.

Program Committee, Requirements Engineering Track, 13th Edition at the 35th Annual ACM Symposium on Applied Computing (SAC-2020), Brno, Czech Republic, March 30-April 3, 2020.

Program Committee, Third Workshop on Natural Language Processing for Requirements Engineering (NLP4RE'20), in conjunction with REFSQ'20, Italy, 2020.

Program Committee, the 13th International i* Workshop, in conjunction with RE'20, Zurich, Switzerland, 2020.

Program Committee, REthics2020: Workshop on Ethics in Requirements Engineering Research and Practice, in conjunction with RE'20, Zurich, Switzerland, 2020.

Program Committee, EmpER20: the 3rd International Workshop on Empirical Methods in Conceptual Modeling, in conjunction with ER 2020 from November 3rd to 6th, 2020.

Program Committee, the 27th IEEE International Requirements Engineering Conference (RE'19), South Korea, 2019.

Program Committee, Special Track on Internet of Things (IoT), at the 34th Annual ACM Symposium on Applied Computing (SAC-2019), St. Raphael Resort, Limassol, Cyprus, April 8-12, 2019.

Program Committee, Requirements Engineering Track, 12th Edition at the 34th Annual ACM Symposium on Applied Computing (SAC-2019), St. Raphael Resort, Limassol, Cyprus, April 8-12, 2019.

Program Committee, the 26th IEEE International Requirements Engineering Conference (RE'18), Banff, Canada, 2018.

Program Committee, The 37th International Conference on Conceptual Modeling (ER 2018), Xi'an, China. from Oct. 22-25, 2018.

Program Committee, The 5th Workshop Quality of Models and Models of Quality (QMMQ'18), in conjunction with the 37th International Conference on Conceptual Modeling (ER'18), Xi'an, China. from Oct. 22-25, 2018.

Program Committee, The 5th International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE'18), Banff, Canada, 2018.

Program Committee, Special Track on Internet of Things (IoT), at the 33rd Annual ACM Symposium on Applied Computing (SAC-2018), Pau, France, 2018.

Program Committee, Requirements Engineering Track, 11th Edition at the 33rd Annual ACM Symposium on Applied Computing (SAC-2018), Pau, France, 2018.

Program Committee, the 24th International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2018), Utrecht, The Netherlands, 2018.

Program Committee, the 25th International Requirements Engineering Conference (RE'17), Lisbon, Portugal, 2017.

Program Committee, RENext! - the 25th International Requirements Engineering Conference, Lisbon, Portugal, 2017.

Program Committee, the 36th International Conference on Conceptual Modeling (ER), Valencia, Spain, 2017.

Program Committee, the 7th International Workshop on Requirements Patterns (RePa), Lisbon, Portugal, 2017.

Program Committee, the 4th International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE), Lisbon, Portugal, 2017.

Program Committee, the 10th Requirements Engineering Track, at the 32nd Annual ACM Symposium on Applied Computing (SAC-2017) Marrakech, Morocco, 2017.

Program Committee, RENext! - the 24th International Requirements Engineering Conference, Beijing, China, 2016.

Program Committee, the 35th International Conference on Conceptual Modeling (ER), Gifu, Japan, 2016.

Program Committee, the 18th International IEEE Conference on Business Informatics (CBI), Paris, France, 2016.

Program Committee, - the 21st International Conference on Exploring Modeling Methods in Systems Analysis and Design (EMMSAD), co-located at CAiSE, Ljubljana, Slovenia, 2016.

Program Committee, the 3rd International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE), Beijing, China, 2016.

Program Committee, the 9th International i* (iStar) Workshop, Beijing, China, 2016.

Program Committee, the 1st International Workshop on Requirements for Visualizations in Systems Engineering (ReVISE'16), Beijing, China 2016.

Program Committee, the 23rd International Requirements Engineering Conference (RE15), Ottawa, Canada, 2015.

Program Committee, the 34th International Conference on Conceptual Modeling (ER), Stockholm, Sweden, 2015.

Program Committee, the 17th International IEEE Conference on Business Informatics (CBI), Lisbon, Portugal, 2015.

Program Committee, the 23rd European Conference on Information Systems (ECIS), Muenster, Germany, 2015.

Program Committee, the 2nd International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE), Ottawa, Canada, 2015.

Program Committee, the 8th International i* (iStar) Workshop, Ottawa, Canada, 2015.

Program Committee, the 16th International IEEE Conference on Business Informatics (CBI), Geneva, Switzerland, 2014.

Program Committee, the 9th Mediterranean Conference on Information Systems (MCIS), Verona, Italy, 2014.

Program Committee, the 1st International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE), Stockholm, Sweden, 2014.

Program Committee, the 7th International Workshop on Requirements Engineering and Law (RELAW), Stockholm, Sweden, 2014.

Program Committee, the 7th International i* (iStar) Workshop, Thessaloniki, Greece, 2014.

Program Committee, the 8th TEE Workshop: Transformation & Engineering of Enterprises, Geneva, Switzerland, 2014.

Program Committee, TEE-8-CS - TEE-8 case studies, Geneva, Switzerland, 2014.

Program Committee, the 6th International Workshop on Requirements Engineering and Law (RELAW), Rio de Janeiro, Brasil, 2013.

Program Committee, the 5th International Workshop on Requirements Engineering and Law (RELAW), Chicago, USA, 2012.

UNIVERSITY	UMaine, University Research Council (URC)	2023 – 2025
SERVICE	UMaine, CUGR Proposal Reviewer	2022 – 2024
	UMaine, Faculty Search Committee	Spring/Summer 2023
	UMaine, Dean Haddad's Review	Spring 2023
	UMaine, Graduate Program Committee	Since 2018
	UMaine, Goldwater Nomination Committee	2021
	UMaine, MCECIS Fundraising and Outreach Committee	2021 – 2022
	UMaine, MCECIS DEI Committee	2021 – 2022
	UMaine, Computer Science T/P Committee	2019 – 2020
	UMaine, Computer Science Townhall, 3 times	2018 – 2019

UMaine, Faculty (Tenure-Track) Search Committee	Spring 2018
Texas Tech, Faculty Search Committee	2017 – 2018
Texas Tech, Undergraduate Program Committee	2017 – 2018
Texas Tech, Graduate Program Committee	2016 – 2017

ACADEMIC
ADVISING -
CURRENT
MEMBERS

Shadi Babaei, PhD student, Computer Science, University of Maine, since January 2024.
 Ali Pourghasemi Fatideh, PhD student, Computer Science, University of Maine, since January 2024.
 Temitope Omotayo Olayinka, PhD student, Computer Science, University of Maine, since September 2023.
 Sara Haghighi, PhD student, Computer Science, University of Maine, since September 2022.
 Vijiyanta Jain, BSc. and PhD student, Computer Science, Texas Tech and the University of Maine, since June 2018.
 Maxwell Prybylo, MSc., Computer Science, University of Maine, since September 2022.
 Adam Green, MSc., Computer Science, University of Maine, since January 2022.
 Ersilda Cako, BSc. Computer Science, University of Maine, since September 2023
 Ryan Shanz, BSc. Computer Science, University of Maine, since September 2023
 Wilder Baldwin, BSc. Computer Science, University of Maine, since September 2023
 Garrett Engstrom, BSc. Computer Science, University of Maine, since January 2023
 Kenzie Young, BSc., Computer Science, University of Maine, since January 2023
 Sean Radel, BSc., Computer Science, University of Maine, since January 2023
 Joe Godinez, BSc., Computer Science, University of Maine, since January 2023
 Theo Brucker, BSc., Computer Science, University of Maine, since Fall 2021
 Zack Delile, BSc. and Maine Top Scholar, Computer Science and Math, University of Maine, since Fall 2021

ACADEMIC
ADVISING -
FORMER
MEMBERS

Diana Marosin, MSc. student, Computer Science, Luxembourg Institute of Science and Technology, 2014 – 2016 (Graduated).
 Sanonda Gupta, Msc. student, Computer Science, University of Maine, January 2019 – September 2022 (Graduated).
 Amin Rabinia, Msc. student, Computer Science, University of Maine, Fall 2017 – Spring 2020 (Graduated).
 Avery Gosselin, BSc, Computer Science, University of Maine, 2020 - 2022 (Graduated).
 Stephen Kaplan, BSc, Computer Science, University of Maine, 2018 - 2022 (Graduated).
 Dylan Bulmer, BSc, Computer Science, University of Maine, 2019 - 2022 (Graduated).
 Sam Morse, BSc, Computer Science, University of Maine, 2020 - 2022 (Graduated).
 Mac Creamer, BSc, Computer Science, University of Maine, 2020 - 2022 (Graduated).
 Aubree Nygaard, BSc, Computer Science, University of Maine, 2018 - 2021 (Graduated).
 Zane Nygaard, BSc, Computer Science, University of Maine, Fall 2018 – Fall 2020.
 Jens Hansen, BSc, Computer Science, University of Maine, 2019 - 2020 (Graduated).
 Jacob Opoku, BSc. Student, Computer Science, Texas Tech, Spring 2017 – Spring 2018 (Graduated).
 Vasilis Vloutis, BSc. Student, Computer Science, Texas Tech, Summer 2017 – Spring 2018 (Graduated).
 Bohyun Suh, BSc. Student, Computer Science, Texas Tech, Fall 2017 – Spring 2018 (Graduated).

OUTREACH
ACTIVITIES

IEEE Maine Chapter – Secretary	Since 2022
Advisor of ACM-W at the University of Maine	Since 2021
Liaison for NCWIT Aspirations in Computing at the University of Maine	Since 2021
UMaine Cybersecurity Club Advisor	2018 – 2019

PROFESSIONAL	Member of the International Association of Privacy Professionals	Since 2020
MEMBERSHIPS	Member of the ACM Special Interest Group on Software Engineering (SIGSOFT)	Since 2016
	Member of the ACM-W Group	Since 2016
	Member of the IEEE Computer Society	Since 2007