## GONDY LEROY, PH.D.,

### CURRICULUM VITAE

Professor, Management Information Systems

Research Director – Center for Management Innovation

in Healthcare

Associate Dean for Research Eller College of Management University of Arizona

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Last updated: August 2025

## APPOINTMENTS & MEMBERSHIP

- 2024– Present, Research Director Center for Management Innovations in Healthcare, Eller College of Management, University of Arizona
- 2023– Present, Member, Healthy Aging Initiative, University of Arizona
- 2021– Present, Associate Dean for Research, Eller College of Management, University of Arizona
- 2021 Present, Member, Cognitive Science Graduate Interdisciplinary Program, University of Arizona
- 2020

   Present, Member, Valley Fever Center of Excellence, University of Arizona
- 2019– Present: Faculty Member, Bio5, University of Arizona
- 2017– Present: Professor, Management Information Systems, Eller College of Management, University of Arizona
- 2015– Present: Member, Autism Collective, University of Arizona, Arizona.
- 2014–2024, Member, Center for Management Innovations in Health Care, Eller College of Management, University of Arizona, Arizona
- 2013 2017: Associate Professor, Management Information System, Eller College of Management, University of Arizona, Arizona.
- 2009 2013: Associate Professor, School of Information Systems and Technology, Claremont Graduate University, California.
- 2006 2013: Extended Faculty, Applied Women's Studies, Claremont Graduate University, California
- 2010: Visiting Scholar, 88-Crime (Tucson, AZ), Fontana Police Department (Fontana, CA), Brea Police Department (Brea, CA).
- 2006 Oct/Nov: Visiting Scholar, National Library of Medicine, National Institutes of Health, Bethesda.
- 2003 2009: Assistant Professor, School of Information Systems and Technology, Claremont Graduate University, California.
- 2003 Summer: Visiting Scholar, National Library of Medicine, National Institutes of Health, Bethesda.
- 1998 2003, Research Associate, Artificial Intelligence Lab, Management Information Systems, The University of Arizona.

## **EDUCATION**

- Ph.D. (Superior), Management Information Systems, 2003, University of Arizona, Tucson, AZ
- M.S., Management Information Systems, 1999, University of Arizona, Tucson, AZ
- Combined B.S. & M.S. (Cum Laude), Cognitive, Experimental Psychology, 1996, Catholic University of Leuven, Belgium.

#### LEADERSHIP ROLES

- 2025: Doctoral Consortium Co-Chair, IEEE International Conference on Healthcare Informatics (ICHI).
- 2024: Co-Chair Early Career Symposium, AMCIS, Salt Lake City, August 15-17, 2024
- 2023: Doctoral Consortium Co-Chair, IEEE International Conference on Healthcare Informatics (ICHI), Houston Texas, June 26-29, 2023.
- 2022: Doctoral Consortium Co-Chair, IEEE International Conference on Healthcare Informatics (ICHI), Rochester, Minnesota, June 11-14, 2022.
- 2021: Doctoral Consortium Co-Chair, DESRIST 2021, Norway
- 2019: Session Chair, INFORMS Healthcare Conference, July 27 29, Cambridge, Massachusetts.
- 2019: Conference Co-Chair, 14<sup>th</sup> International Conference on Design Science Research in Information Systems and Technology (DESRIST) –, Boston June 4-6, 2019.
- 2018: Chair Best Paper Award Committee. Association for Information Systems SIG Health.
- 2017: Chair Best Paper Award Committee. Association for Information Systems SIG Health.
- 2016: Co-Chair, AIS-SIG-Health Workshop, Dublin, Ireland, December 10.
- 2016: Co-Chair, Innovations in Electronic Medical Records and Personal Health Records, Minitrack, 12th Americas Conference on Information Systems (AMCIS), San Diego, August 11-13.
- 2015: Cluster Chair, INFORMS Healthcare, July 29-31, Nashville, TN.
- 2014-2016: President, Special Interest Group on Health (AIS SIG-Health) of the Association for Information System (AIS).
- 2014: Task Leader, with Tobias Schreck and Hanna Suominen, Task 1 Information Visualization, The ShARe/CLEF eHealth Evaluation Lab.
- 2012-2014: President-Elect, Special Interest Group on Health (AIS SIG-Health) of the Association for Information System (AIS).
- 2013: Poster and Demo Chair & Senior Program Committee Member, IEEE International Conference on Healthcare Informatics (ICHI 2013), Philadelphia, September.
- 2012: Expert Faculty Panel, Doctoral Consortium, Seventh International Conference on Design Science Research in Information Systems and Technology (DESRIST), Las Vegas, May 14-15.
- 2012: Mentor and Co-Chair, Doctoral Consortium, ACM International Health Informatics Symposium (IHI), Miami, Florida, January 28-30.
- 2010: Chair, E-Health Track, The 10th International Conference on Electronic Business (ICEB 2010) Service-Oriented E-Business, Shangai, China, Nov 29 Dec 3.
- 2009: Co-Chair, Healthcare track, International Conference on Information Systems (ICIS), Tucson, Arizona, December 15-17.
- 2008: Co-Chair, Integrating the Digital Healthcare Enterprise Minitrack, 14th Americas Conference on Information Systems (AMCIS), Learning from the Past and Charting the Future of the Discipline, Toronto, Ontario, 14-17 August.
- 2007: Co-Chair, Integrating the Digital Healthcare Enterprise Minitrack, 13th Americas Conference on Information Systems (AMCIS), Reaching New Heights, Keystone, Colorado, USA, August 9-12.
- Co-Chair, Integrating the Digital Healthcare Enterprise Minitrack, 12th Americas Conference on Information Systems (AMCIS), Connecting the Americas, Acapulco, Mexico, August 4-6.

# LEADERSHIP ROLES: DIVERSITY, INCLUSION, AND EQUITY

- 2024, Co-Organizer, Women in IT, The 12th IEEE International Conference on Healthcare Informatics (IEEE ICHI 2024) IEEE ICHI, Orlando, June 3-6, 2024.
- 2013 Present: Academic Liaison for the MIS Department, University of Arizona, with the National Center for Women and Information Technology (NCWIT).
- 2017 2023: Co-Chair, HICSS 53 Women's Networking Event: Co-Chair with Cynthia Riemenschneider and Nanette Levinson, Hawaii International Conference on System Sciences.
- 2018 –2022: Member Arizona Tech Council Women in the Workforce Committee.
- 2013 2022: Director, Tomorrow's Leaders Equipped for Diversity, University of Arizona.
- 2016 2021: Committee Member, Women in American Medical Informatics Association (AMIA) Task Force.
- 2016 -2019: Co-Chair, Association for Information Systems Women's Network College
- 2016-2018: Chair, Eller College of Management Committee on Diversity and Inclusion
- 2016: Co-Chair Workshop on Women in Cybersecurity & Program Committee Member, IEEE International Conference on Intelligence and Security Informatics (IEEE-ISI), Tucson, Arizona, September 27-30.
- 2012: Chair Workshop 4 Computing Claremont-Scripps Computing Academy. Part 4: Introducing Computing to High School Students, November 3.
- 2012: Chair Workshop 3 Computing Claremont-Scripps Computing Academy. Part 3: Introducing Computing to High School Students, October 27.
- 2012: Chair Workshop 2 Computing Claremont-Scripps Computing Academy. Part 2: Leadership Skills for Women in IT, April 13.
- 2012: Chair Workshop 1 Computing Claremont-Scripps Computing Academy. Part 1: Graduate-Undergraduate Knowledge Transfer, March .
- 2012: Mentor, WitsOn Women in Technology Sharing Online, Organized by Harvey Mudd College and Piazza, October.
- 2010-2011: Co-Leader, National Center for Women & Information Technology (NCWIT), Recruitment and New Member Engagement, with Christine Alvarado (Harvey Mudd College) and Leen-Kiat Soh (University of Nebraska).
- 2011-2012: Co-Leader, National Center for Women & Information Technology (NCWIT), Recruitment and New Member Engagement, with Leen-Kiat Soh (University of Nebraska) and Kiranmai Bellam (Prairie View A&M University).
- 2007: Chair, Workshop: Women in IT Emerging Leaders 2007, at the Second International Conference on Design Science Research in Information Systems and Technology (DESRIST'07), Pasadena, CA, May 2007.
- Fall 2007 2013, Academic Liaison for the School of Information Systems and Technology with the National Center for Women and Information Technology (NCWIT).
- 2006: Chair, Workshop: Women in IT Emerging Leaders 2006, at the First International Conference on Design Science Research in Information Systems and Technology (DESRIST'06), Claremont, CA, February.
- Collaboration with Tim Coates (Technical Director, Webb High School (Claremont)), High school students' involvement in research on software on handhelds for children with autism. 2008.

# JOURNAL PUBLICATIONS

Journal Name	Impact Factor / 5yr Impact Factor	Nr. of Pubs
ACM Computing Surveys	23.8	1
Clinical Infectious Diseases	8.2	1
Government Information Quarterly	7.8	1
Expert Systems with Applications	7.5	1
IEEE Journal of Biomedical and Health Informatics	6.7	1
Journal of Medical Internet Research (JMIR)	5.8	6
Journal of the American Medical Informatics Association (JAMIA)	4.7 / 5.8	6
Vaccines	5.2	1
ACM Transactions on Information Systems	5.4	1
Journal of Biomedical Informatics	4.0	5
Empirical Software Engineering	4.22	1
International Journal of Medical Informatics	3.7	4
Journal of Medical Systems	3.5 / 4.7	1
Current Opinion in Allergy & Clinical Immunology	3.0	1
Health Communication	3.0 / 3.5	1
Communication Monographs	3.1 / 7.6	1
Journal of the American Society for Information Science and Technology (JASIST)	2.8	4
Clinics in Chest Medicine	2.6	1
JAMIA Open	2.56	2
Journal of Occupational and Environmental Medicine (JOEM)	2.3	3
IEEE IT Professional	2.2	1
IEEE Transactions on Information Technology in Biomedicine (title change to IEEE Journal of Biomedical and Health Informatics)	2.493	1
Health Systems	1.2	1
Journal of Health Communication	1.596	1
International Journal of Biomedical Engineering and Technology (IJBET)	1.01	2
International of Organizational Knowledge Management		1
AIS Transactions on Replication Research		2
Procedia Computer Science		1

(personal publication impact: Google Scholar H-index: 35; Google Scholar I10-index: 79)

 $\frac{http://www.ncbi.nlm.nih.gov/pubmed/?term=gondy+leroy}{https://scholar.google.com/citations?hl=en\&user=kQ9zCZAAAAAJ}$ 

- A. Ahmed, G. Leroy, D. Kauchak, P. Barai, and P. Harber, "Parallel Corpus Analysis of Text and Audio Comprehension to Evaluate Readability Formula Effectiveness: A quantitive study", Accepted for Publication in JMIR. [Preprint: scite.ai: <a href="https://scite.ai/reports/a-parallel-corpus-analysis-of-keW9pN1M">https://scite.ai/reports/a-parallel-corpus-analysis-of-keW9pN1M</a> , DOI: 10.2196/preprints.69772 ]
- 2. C. Woolsey, G. Leroy, and N. Maltman, "Enhancing Text Datasets with Scaling and Targeting Data Augmentation to Improve BERT-Based Machine Learners," Expert Systems With Applications, In print, 2025. DOI: <a href="https://doi.org/10.1016/j.eswa.2025.128151">https://doi.org/10.1016/j.eswa.2025.128151</a>.
- 3. P. Barai, A. Ahmed., and G. Leroy, "A comparative Evaluation of Text and Audio Simplification: A Methodological Replication Study", AIS Transactions on Replication Research, 57, 2025. <a href="https://aisel.aisnet.org/cais/vol57/iss1/48/">https://aisel.aisnet.org/cais/vol57/iss1/48/</a>
- 4. T. Cohen, W. Xu, Y. Guo, S. Pakhomov, G. Leroy, Coherence and Comprehensibility: Large Language Models Predict Lay Understanding of Health-related Content", Journal of Biomedical Informatics (JBI), 2024 Dec 9:161:104758, PMID: 39662650 DOI: 10.1016/j.jbi.2024.104758.
- Gondy Leroy, Madison Preece, Ajay Jaswani, Hyunju Song, Jennifer G. Andrews, Maureen Kelly Galindo, Yang Gu, Sydney Rice, "A transparent deep learning approach to identify autism spectrum disorders (ASD) in clinical notes and overcome obstacles to machine learning with small datasets", Journal of the American Medical Informatics Association (JAMIA), 2024.PMID: 38626184, PMC11105145, DOI: 10.1093/jamia/ocae080. (AIS SIG Health Best Paper Award)

- 6. Y. Guo, W. Qiu, G. Leroy, S. Wang, and T. Cohen, "Retrieval Augmentation of Large Language Models for Lay Language Generation," Journal of Biomedical Informatics (JBI), December 2023. <a href="https://doi.org/10.1016/j.jbi.2023.104580">https://doi.org/10.1016/j.jbi.2023.104580</a>
- A. Ahmed, G. Leroy, H. Y. Lu, D. Kauchak, J. Stone, P. Harber, S. A. Rains, P. Mishra, and B. Chitroda, "Audio Delivery of Health Information: An NLP Study of Information Difficulty and Bias in Listeners", Procedia Computer Science, 219, 1509-1517 (Special Issue HCist International Conference on Health and Social Care Information Systems and Technologies, Portugal, November 11, 2022),2023. https://doi.org/10.1016/j.procs.2023.01.442
- 8. A. Keselman1, C. A. Smith, A. J. Wilson, G. Leroy, D. R. Kaufman, "Cognitive and Cultural Factors that Affect General Vaccination and Covid-19 Vaccination Attitudes", Vaccines, COVID-19 Vaccines and Vaccination Section, 11(1), 94, January 2023. [https://www.mdpi.com/2076-393X/11/1/94]
- 9. G. Leroy, D. Kauchak, D. Haeger, and D. Spegman, "Evaluation of an Online Text Simplification Editor using Manual and Automated Metrics for Perceived and Actual Text Difficulty", JAMIA Open, 5(2), July ooac044, 2022. [https://doi.org/10.1093/jamiaopen/ooac044].
- 10. S. Rains, P. Harber, E. Warner, and G. Leroy, "Psychological Reactance Theory and COVID-19 Mask Mandates: Examining Anger in Mask Tweets Before and After State-Level Mandates", Communications Monographs, March 2022. [DOI:10.1080/03637751.2022.2043555]
- 11. A. Keselman, C. Arnott Smith, G. Leroy, and D. Kaufman, "Would You Share This Video?: Factors Influencing Willingness to Share Online Health Misinformation," Journal of Medical Internet Research (JMIR), 23 (12), December 2021. [https://www.jmir.org/2021/12/e30323]
- 12. A. L. Hartzler, G. Leroy, B. Daurelle, M. Ochoa, J. Williamson, D. Cohen, C. Stipelman, *Gender parity in biomedical informatics scientific dissemination: Retrospective observational case study of the AMIA Annual Symposium: 2017-2020*, JAMIA, 28(9), 1928-1935, August 2021. [doi: 10.1093/jamia/ocab097]
- 13. S. A. Rains, G. Leroy, E. L. Warner, and P. Harber, "Psycholinguistic Markers of COVID-19 Conspiracy Tweets and Predictors of Tweet Dissemination", Health Communication. Published online: 20 May 2021, [https://doi.org/10.1080/10410236.2021.1929691]
- 14. M. Kumar and G. Leroy, *Healthcare-related Emergencies An examination of Factors Affecting Compliance with Alerts*", AIS Transactions on Replication Research, 7, November 2021. [https://aisel.aisnet.org/trr/vol7/iss1/3/]
- 15. P. Harber, and G. Leroy, "Informatics approaches for recognition, management, and prevention of occupational-respiratory disease", Clinics in Chest Medicine, 41, Dec 2020. [https://doi.org/10.1016/j.ccm.2020.08.008]
- 16. J. Pu, F. M. Donovan, K. Ellingson, G. Leroy, J. Stone, E. Bedrick, and J. N. Galgiani, "Clinician Practice Patterns that Result in the Diagnosis of Coccidioidomycosis Before or During Hospitalization", Clinical Infectious Diseases, , ciaa739, June, 2020.
- 17. G. Leroy and D. Kauchak, "A Comparison of Text versus Audio for Information Comprehension with Future Uses for Smart Speakers", JAMIA Open, 2 (2), July 2019, Pages 254–260, 2019. [DOI: 10.1093/jamiaopen/ooz011]
- 18. P. Harber and G. Leroy, "*Insights from Twitter about Public Perceptions of Asthma, COPD, and Exposures*", Journal of Occupational and Environmental Medicine (JOEM), Jun; 61(6):484-490, 2019. [DOI: 10.1097/JOM.00000000001590].
- 19. P. Mukherjee, G. Leroy and D. Kauchak, "Using Lexical Chains to Identify Text Difficulty: A Corpus Statistics and Classification Study", IEEE Journal of Biomedical and Health Informatics. 2019 Sep;23(5):2164-2173. doi: 10.1109/JBHI.2018.2885465, PMID: 30530380 PMCID: PMC6551329.
- 20. G. Leroy, Y. Gu, S. Pettygrove, M.K. Galindo, A. Arora, M. Kurzius-Spencer, "Automated Extraction of Diagnostic Criteria from Electronic Health Recordes for Autism Spectrum Disorders: Development, Evaluation and Case Study", Journal of Medical Internet Research (JMIR), 20, 11, 2018. [DOI: 10.2196/10497]
- 21. N. Kloehn, G. Leroy, D. Kauchak, Y. Gu, S. Colina, N.P. Yuan, D. Revere, "Improving Consumer Understanding of Medical Text: Development and Validation of a New SubSimplify Algorithm to Automatically Generate Term Explanations in English and Spanish", Journal of Medical Internet Research (JMIR), 20, 8, 2018.[DOI: 10.2196/10779]

- 22. M. Wimble and G. Leroy, "*Health Information Technology: Promise and Progress*", Health Systems, June 2018. [DOI: 10.1080/20476965.2018.1473944][Peer reviewed editorial]
- 23. P. Mukherjee, G. Leroy, D. Kauchak, S. Rajnarayanan, D. Diaz, N. Yuan, T. Pritchard, and S. Colina, "NegAIT: A New Parser for Medical Text Simplification Using Morphological, Sentential and Double Negation", Journal of Biomedical Informatics, 69, 55-62 2017. [NegAIT Source code: <a href="https://github.com/kloehnen/NegAIT">https://github.com/kloehnen/NegAIT</a>, <a href="https://github.arizona.edu/content/resources">https://github.arizona.edu/content/resources</a>]
- 24. D. Kauchak, G. Leroy and A. Hogue, "*Measuring Text Difficulty Using Parse-Tree Frequency*", Journal of the Association for Information Science and Technology (JASIST), 68, 9, 2017.
- 25. P. Harber and G. Leroy, "Feasibility and Utility of Lexical Analysis for Occupational Health Text", Journal of Occupational and Environmental Medicine (JOEM), June, 59, 6, 578-587, 2017. [doi: 10.1097/JOM.0000000001035]
- 26. P. Harber and G. Leroy, "Social Media Use for Occupational Lung Disease", Current Opinion in Allergy & Clinical Immunology, 17(2), 72-77, 2017.
- 27. P. Harber, G. Leroy, "Social Media (Twitter) for Assessing Concerns About Obstructive Airway Disease". Am J Respir Crit Care Med 2016; 193: A-2009.
- 28. D. Kauchak and G. Leroy, "Moving Beyond Readability Metrics for Simplifying Health-related Text", IEEE IT Professional, 8(3), 45-51, 2016.
- 29. G. Leroy, D. Kauchak and A. Hogue, "Effects on Text Simplification: Evaluation of Splitting up Noun Phrases", Journal of Health Communication, 21 (Suppl), 18-26, 2016. [doi: 10.1080/10810730.2015.1131775.]
- 30. P. Harber and G. Leroy, "Assessing Work-Asthma Interaction with Amazon Mechanical Turk", Journal of Occupational and Environmental Medicine (JOEM), April, 57 (4), 381-385, 2015.
- 31. C.-H. Ku and G. Leroy, "A Decision Support System: Automated Crime Report Analysis and Classification for e-Government", Government Information Quarterly, 31 (4), 2014.
- 32. G. Leroy and D. Kauchak, "*The Effect of Word Familiarity on Actual and Perceived Text Difficulty*", Journal of the American Medical Informatics Association (JAMIA), 21, e1, 2014. [doi:10.1136/amiajnl-2013-002172]
- 33. M. Kwak, G. Leroy, J.D. Martinez, and J. Harwell, "Development and Evaluation of a Biomedical Search Engine using a Predicate-based Vector Space Model", Journal of Biomedical Informatics, 15, 7, e144, 2013.[doi: 10.1016/j.jbi.2013.07.006]
- 34. G. Leroy, J.E. Endicott, D. Kauchak, O. Mouradi, and M. Just, "User Evaluation of the Effects of a Text Simplification Algorithm using Term Familiarity on Perception, Understanding, Learning and Information Retention," Journal of Medical Internet Research (JMIR), 15(7):e144, 2013.
- 35. G. Leroy, D. Kauchak, and O. Mouradi, "A User-study Measuring the Effects of Lexical Simplification and Coherence Enhancement on Perceived and Actual Text Difficulty", International Journal of Medical Informatics, 82, 8, 717-730, 2013.
- 36. M. Kwak, G. Leroy and M. Kim, "Development and Evaluation of a Triple Parser to Enable Visual Searching with a Biomedical Search Engine", International Journal of Biomedical Engineering and Technology (IJBET), Vol. 10, No 4, 351-367, 2012.
- 37. C. Ku and G. Leroy, "A Crime Reports Analysis System to Identify Related Crimes," Journal of the American Society or Information Science and Technology (JASIST), 62 (8), 1533-1547, 2011.
- 38. C. Gonzales and G. Leroy, "*Eliciting User Requirements using Appreciative Inquiry*", Empirical Software Engineering, 16(6), 733-772, DOI: 10.1007/s10664-011-9156-x, 2011.
- 39. G. Leroy, S. Helmreich, and J. Cowie, "The Influence of Text Characteristics on Perceived and Actual Difficulty of Health Information", International Journal of Medical Informatics, 79 (6), 438-449, (June) 2010.
- 40. G. Leroy and T. Miller, "Perils of Providing Visual Health Information Overviews for Consumers with Low Health Literacy or High Stress", Journal of the American Medical Informatics Association (JAMIA), 17, 220-223, (March/April) 2010 (DOI: 10.1136/jamia.2009.002717)

- 41. G. De Leo, C. Heins-Gonzales, P. Battagiri, G. Leroy, "A Smart-phone Application and a Companion Website for the Improvement of the Communication Skills of Children with Autism: Clinical Rationale, Technical Development and Preliminary Results", Journal of Medical Systems, 2010. [DOI: 10.1007/s10916-009-9407-1]
- 42. K. A. Al-Busaidi, L. Olfman, T. Ryan, and G. Leroy, "Sharing Knowledge to A Knowledge Management System: Examining the motivators and the benefits in an Omani organization," Journal of Organizational Knowledge Management, Vol. 2010, Article ID 325835, 2010.
- 43. A. Iriberri and G. Leroy, "A Life Cycle Perspective on Online Community Success", ACM Computing Surveys, vol. 41, issue 2, Article 11, 2009.
- 44. A. Keselman, R. Logan, C. A. Smith, G. Leroy, Q. Zeng-Treitler, "Developing Informatics Tools and Strategies for Consumer-centered Health Communication," Journal of the American Medical Informatics Association (JAMIA), vol. 15, issue 4, 473-483, 2008.
- 45. A. Keselman, C. Arnott Smith, G. Divita, H. Kim, A. Browne, G. Leroy, Q. Zeng-Treitler, "Consumer Health Concepts that do not Map to the UMLS: Where Do They Fit?," Journal of the American Medical Informatics Association (JAMIA), vol. 15, issue 4, 496-505, 2008.
- 46. G. Leroy, T. Miller, G. Rosemblat, and A. Browne, "A Balanced Approach to Health Information Evaluation: A Vocabulary-based Naïve Bayes Classifier and Readability Formulas," Journal of the American Society for Information Science and Technology (JASIST), vol. 59, issue 9, 1409-1419, 2008.
- 47. T. Miller and G. Leroy, "Dynamic Generation of a Health Topics Overview from Consumer Health Information Documents," International Journal of Biomedical Engineering and Technology (IJBET), vol. 1, issue 4, 395-414, 2008.
- 48. G. Leroy, J. Xu, W. Chung, S. Eggers and H. Chen, "An End User Evaluation of Query Formulation and Results Review Tools in Three Medical Meta-Search Engines," International Journal of Medical Informatics, vol. 76, issue 11-12, pp 780-789, November-December 2007.
- 49. G. Leroy and T. C. Rindflesch, "Effects of Information and Machine Learning Algorithms on Word Sense Disambiguation with Small Datasets," International Journal of Medical Informatics, vol. 74, issue 7-8, 573-585, 2005.
- 50. G. Leroy and H. Chen, "Genescene: An Ontology-enhanced Integration of Linguistic and Co-occurrence based Relations in Biomedical Texts," Journal of the American Society for Information Systems and Technology (JASIST), vol. 56, issue 5, 457-468, March 2005.
- 51. G. Leroy, A. Lally, and H. Chen. "The Use of Dynamic Contexts to Improve Casual Internet Searching," ACM Transactions on Information Systems (ACM -TOIS), vol. 21, issue 3, pp 229-253, July 2003.
- 52. G. Leroy, H. Chen, and J. D. Martinez. "A Shallow Parser Based on Closed-Class Words to Capture Relations in Biomedical Text," Journal of Biomedical Informatics (JBI), vol. 36, pp 145-158, June 2003.
- 53. G. Leroy and H. Chen, "Meeting Medical Terminology Needs: The Ontology-enhanced Medical Concept Mapper," IEEE Transactions on Information Technology in Biomedicine, vol. 5 (4), pp 261 270, December 2001.

## CONFERENCE PROCEEDINGS: FULL PAPERS

- 1. A. K. S. K. Nandiraju, G. Leroy, D. Kauchak, and A. Ahmed. "Automated Feedback Loops to Protect Text Simplification with Generative AI from Information Loss", Intelligent Systems Conference (IntelliSys) 2025, 28-29 August, Amsterdam, The Netherlands, 2025.
- 2. C. Woolsey, S. Lee, N. Maltman, and G. Leroy, "Using Avatars for Anonymous Diagnosing", 15th Annual Conference on Health IT and Analytics (CHITA), Austin, Texas, April 25-26, 2025
- 3. Y. Guo, T. August, G. Leroy, T. Cohen, L. L. Wang, "APPLS: Evaluating Evaluation Metrics for Plain Language Summarization", EMNLP, November 2024.

- 4. D. Kauchak, V. Song, P. Mishra, G. Leroy, P. Harber, S. Rains, J. Hamre, and N. Morgenstein, "Automatic Generation of a Large Multiple-Choice Question-Answer Corpus", IntelliSys, Amsterdam, Netherlands, September 2024.
- 5. C. Woolsey, S. Miller, P. Harber, S. Rains, G. Leroy, and D. Kauchak, "Large Language Models for Image Generation to Augment Text", IEEE ICHI, June 2024.
- 6. A. E. Whitlock, G. Leroy, F. M. Donovan, J. N. Galgiani, "ICD Codes are Insufficient to Create Datasets for Machine Learning: An Evaluation Using All of Us Data for Coccidioidomycosis and Myocardial Infarction", IEEE ICHI, June 2024
- 7. C. Woolsey, G. Leroy P. Barai, P. Bisht, and J. Rothman, "*Utilizing Large Language Models to Increase the Performance of Classification Neural Networks*", Boston, AMIA Summit, March 2024.
- 8. P. Barai, G. Leroy, P. Bisht, J. Rothman, S. Lee, J. Andrews, S. Rice, and A. Ahmed, "Crowdsourcing with Enhanced Data Quality Assurance: An Efficient Approach to Mitigate Resource Scarcity Challenges in Training Large Language Models for Healthcare", Boston, AMIA Summit, March 2024. (Distinguished paper award Data Science and AI Category)
- 9. G. Leroy, D. Kauchak, P. Harber, A. Pal, and A. Shukla, "*Text and Audio Simplification: Human vs. ChatGPT*", Boston, AMIA Summit, March 2024.
- 10. D. Kauchak, G. Leroy, and J. Hamre, "Generating Simpler Medical Synonyms Using Word Embeddings", Boston, AMIA Summit, March 2024.
- 11. A. Ahmed, G. Leroy, S. Rains, P. Barai, P. Harber, and D. Kauchak, "Effects of Added Emphasis and Pause in Audio Delivery of Health Information" Boston, AMIA Summit 2024.
- 12. A. Ahmed, G. Leroy, P. Harber, S. Lee, D. Kauchak, S. A. Rains, and P. Barai "Influence of Audio Speech Rate and Source Text Difficulty on Health Information Comprehension and Retention", Hawaii International Conference on System Sciences (HICSS), January 2024.
- 13. D. Kauchak, J. Apricio, G. Leroy, "Improving the Quality of Suggestions for Medical Text Simplification Tools", AMIA Summit, March 22-24, Chicago, 2022.
- 14. G. Leroy, D. Kauchak, and N. Kloehn, "Impact of Missing Functional Elements on Text and Audio Comprehension", Accepted by the AMIA Annual Fall Symposium, San Diego, November 2021.
- 15. H. Van, D. Kauchak, and G. Leory, "AutoMeTS: The Autocomplete for Medical Text Simplification", 28<sup>th</sup> International Conference on Computational Linguistics, COLING, 2020.
- 16. Y. Gu and G. Leroy, "Use of Conventional Machine Learning to Optimize Deep Learning Hyper-parameters for NLP Labeling Tasks", Hawaii International Conference on System Sciences (HICSS), Maui, Hawaii, January 2020.
- 17. D. Kauchak and G. Leroy, "A Web-Based Medical Text Simplification Tool", Hawaii International Conference on System Sciences (HICSS), Maui, Hawaii, January 2020.
- 18. Y. Gu and G. Leroy, "Large-scale Analysis of Free-Text Data for Mental Health Surveillance with Topic Modelling", AMCIS 2020.
- 19. Y. Gu and G. Leroy, "*Mechanisms for Automatic Training Data Labeling for Machine Learning*", International Conference on Information Systems (ICIS), Munich, Germany, December 2019.
- 20. D. Kauchak, G. Leroy, M. Pei and S. Colina, "Predicting Transition Words between Sentences for English and Spanish Medical Text", AMIA Fall Symposium, November, Washington DC, 2019.
- 21. Y. Cheng, A. F. Mohanty, O. I. Ogunyemi, C. A. Smith, G. Leroy, Q. T. Zeng, "2018 Salary Survey of AMIA Members: Factors Associated with Higher Salaries", AMIA Fall Symposium, November, Washington DC, 2019.
- 22. A. Szep, M. Szep, G. Leroy, D. Kauchak, N. Kloehn, D. Revere, and M. Just," *Algorithmic Generation of Grammar Simplification Rules Using Large Corpora*", AMIA Informatics Summit, March 2019.

- 23. Y. Gu, G. Leroy, S. Pettygrove, M. K. Galindo, M. Kurzius-Spencer, "Optimizing Corpus Creation for Training Word Embedding in Low Resource Domains: A Case Study in Autism Spectrum Disorder (ASD)", Accepted for Publication, AMIA Fall Symposium, 2018.
- 24. Y. Gu, G. Leroy, D. Kauchak, "When synonyms are not enough: Optimal parenthetical insertion for text simplification," AMIA Fall Symposium, November 2017, Washington DC. (Meritorious Mention Best Paper Award SIG Health)
- 25. P. Mukherjee, G. Leroy, D. Kauchak, B. A. Navarrete, D. Y. Diaz, and S. Colina, "*The Role of Surface, Semantic and Grammatical Features on Simplification of Spanish Medical Texts: A User Study*," AMIA Fall Symposium, November 2017, Washington DC.
- 26. G. Leroy, Y. Gu, S. Pettygrove and M. Kurzius-Spencer, "Automated Lexicon and Feature Construction using Word Embedding and Clustering for EHR Classification", 22nd International Conference on Applications of Natural Language to Information Systems, Belgium, June 22-24, 2017.
- 27. G. Leroy, P. Harber and D. Revere, "*Public sharing of medical advice using social media: an analysis of a Twitter*", Seventeenth International Conference on Grey Literature A new wave of textual and non-textual grey literature, December 1-2, Amsterdam, Netherlands, 2015.
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- 29. Alsudais, G. Leroy, and A. Corso, "We Know Where You Are Tweeting from: Assigning a Type of Place to Tweets using Natural Language Processing and Random Forests", IEEE Proceedings of the 3rd International Congress on Big Data, Anchorage, Alaska, Jun 27 July2, 2014.
- 30. J. Harwell, C. Pentoney, and G. Leroy, "Big Data For Query Expansion: A Comparison of Content-based versus Social-based Keywords," 2014 Winter Conference on Business Intelligence, February 27 March 1, Snowbird, Utah, 2014.
- 31. D. Kauchak, O. Mouradi, C. Pentoney, and G. Leroy, "Text Simplification Tools: Using Machine Learning to Discover Features that Identify Difficult Text", 47th Hawaii International Conference on System Sciences (HICSS), Waikaloa, Big Island, Hawaii, January 6-9, 2014.
- 32. C.-H. Ku and G. Leroy, "Automated Crime Report Analysis and Classification for e-Government and Decision Support", 14th Annual International Conference on Digital Government Research (DG.O 2013), Quebec, Canada, 17-20 June, 2013.
- 33. O. Mouradi, G. Leroy, D. Kauchak and J.E. Endicott, "Influence of Text and Participant Characteristics on Perceived and Actual Text Difficulty," Hawaii International Conference on System Sciences (HICSS-40), Maui, January 7-10, 2013.
- 34. G. Leroy, J.E. Endicott, O. Mouradi, D. Kauchak, and M. Just, "Improving Perceived and Actual Text Difficulty for Health Information Consumers using Semi-Automated Methods", American Medical Informatics Association (AMIA) Fall Symposium, Chicago, IL, November 3-7, 2012.
- 35. C-H. Ku, J. H. Nguyen & G. Leroy, "TASC Crime Report Visualization for Investigative Analysis: A Case Study," IEEE International Conference on Information Reuse and Integration 2012 (IEEE IRI 2012), Las Vegas, August 8-10, 2012.
- 36. G. Leroy and J.E. Endicott, "Combining NLP with Evidence-based Methods to Find Text Metrics related to Perceived and Actual Text Difficulty," 2nd ACM SIGHIT International Health Informatics Symposium (ACM IHI 2012), Florida, Miami, January 28-30, 2012.
- 37. G. Leroy and J.E. Endicott, "Term Familiarity to indicate Perceived and Actual Difficulty of Text in Medical Digital Libraries", International Conference on Asia-Pacific Digital Libraries (ICADL 2011) Beijing, China, Oct 24-27, 2011.
- 38. R. McClintock, Y. Lee, J. Hilton, B. Hilton, G. Leroy, "Integrating Environmental Science into Information Technology Content to Generate Student Interest," 16th Americas Conference on Information Systems (AMCIS), Lima Peru, August 12-15, 2010.

- 39. G. Leroy, S. Helmreich, and J.R. Cowie, "The Effects of Linguistic Features and Evaluation Perspective on Perceived Difficulty of Medical Text," Hawaii International Conference on System Sciences, January 5-8, Kauai, 2010.
- 40. G. Leroy, "Persuading Consumers to Form Precise Search Engine Queries," American Medical Informatics (AMIA) Fall Symposium, San Francisco, November 14-18, 2009.
- 41. G. De Leo, C. Gonzales, P. Battagiri and G. Leroy, "A Touch-Screen Smarphone Application and An Online Community for the Improvement of the Communication of Children with Severe Autism and for the Support of Their Teachers and Therapists," 8th Annual International Meeting for Autism Research (IMFAR), Chicago, Illinois, USA, May 7-9, 2009.
- 42. C. Gonzales, G. Leroy, and G. De Leo, "Requirements Engineering using Appreciative Inquiry for an Online Community of Caregivers of Children with Autism", 4th Annual ACM Symposium on Applied Computing, Honolulu, Hawaii, March 8-12, 2009.
- 43. G. Leroy, S. Helmreich, J. Cowie, T. Miller, W. Zheng, "Evaluating Online Health Information: Beyond Readability Formulas," American Medical Informatics Association (AMIA) Annual Symposium, Washington DC, November, 2008. (Nominated for Distinguished Paper Award)
- 44. M. Kwak, W. Kang, G. Leroy, and S. Chatterjee, "*E-Transcript Web Services System Supporting Dynamic Conversion Between XML and EDI*", 14th Americas Conference on Information Systems (AMCIS) 2008 Toronto, Ontario, August 14-17, 2008
- 45. K. Al-Busaidi, L. Olfman, T. Ryan, G. Leroy, "The Motivators and Benefits of Sharing Knowledge to a KMS Repository in an Omani Organization", 10th IBIMA conference, Malaysia, June 30-July 2, 2008. (Best Paper Award)
- 46. G. De Leo and G. Leroy, "Smartphones to Facilitate Communication and Improve Social Skills of Children with Severe Autism Spectrum Disorder: Special Education Teachers as Proxies", Seventh International Conference on Interaction Design & Children, June 11-13, 2008, Chicago, USA.
- 47. Chih Hao Ku, A. Iriberri, and G. Leroy, "*Natural Language Processing and e-Government: Crime Information Extraction from Heterogeneous Data Sources*", Ninth International Conference on Digital Government Research (DG.O 2008), May 18-21, Montreal, Canada.
- 48. Chih Hao Ku, A. Iriberri, and G. Leroy, "Crime Information Extraction from Police and Witness Narrative Reports, 2008 IEEE International Conference on Technologies for Homeland Security", May 12-13, 2008, Boston.
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- 50. G. Leroy, M. Fiszman, and T.C. Rindflesch, "The Impact of Directionality in Predications on Text Mining," Hawaii International Conference on System Sciences (HICSS-41), January 2008. (Nominated for Best Paper Award)
- 51. Iriberri and G. Leroy "Natural Language Processing and e-Government: Extracting Reusable Crime Report Information", IEEE International Conference on Information Reuse and Integration (IEEE IRI-2007), Las Vegas, Nevada, USA, August 13-15, 2007
- 52. E. Sloane, G. Leroy and S. Sheetz, "An Integrated Social Actor and Service Oriented Architecture (SOA) Approach for Improved Electronic Health Record (EHR) Privacy and Confidentiality in the US National Healthcare Information Network (NHIN)", Americas Conference on Information Systems (AMCIS), Keystone, Colorado, USA, August 9-12, 2007.
- 53. J. Gutierrez and G. Leroy, "Predicting Crime Reporting with Decision Trees and the National Crime Victimization Survey", Americas Conference on Information Systems (AMCIS), Keystone, Colorado, USA, August 9-12, 2007.
- 54. K. Al-Busaidi, L. Olfman, T. Ryan, and G. Leroy, "Revealing the Antecedents and Benefits of KMS Use: An Exploratory Study in a Petroleum Company in Oman," Ninth International Conference on Decision Support Systems, 2007.
- 55. T. Miller, G. Leroy, S. Chatterjee, J. Fan, and B. Thoms, "A Classifier to Evaluate Language Specificity in Medical Documents", Hawaii International Conference on System Sciences (HICSS-40), January 2007. (Best Paper Award)

- 56. T. Miller, G. Leroy, and E. Wood, "Dynamic Generation of a Table of Contents with Consumer-Friendly Labels", American Medical Informatics Association (AMIA) Annual Symposium, Washington DC, November 11-15, 2006.
- 57. G. Leroy, E. Eryilmaz, and B. T. Laroya, "*Health Information Text Characteristics*", American Medical Informatics Association (AMIA) Annual Symposium, Washington DC, November 11-15, 2006. (**Nominated for Distinguished Paper Award**)
- 58. G. Leroy, A. Irmscher, and M.H. Charlop-Christy, "Data Mining Techniques to Study Therapy Success with Autistic Children", 2006 International Conference on Data Mining, 26 29 June, Monte Carlo Resort, Las Vegas, USA, 2006
- 59. T. Miller, G. Leroy, J. Huang, S. Chuang, and M.H. Charlop-Christy, "*Using a Digital Library of Images for Communication: Comparison of a Card-Based System to PDA Software*", First International Conference on Design Science Research in Information Systems and Technology, February, Claremont, 2006.
- 60. Iriberri, G. Leroy, N. Garrett, "*Reporting on-Campus Crime Online: User Intention to Use*", Hawaii International Conference On Systems Sciences (HICSS), January, Hawaii, 2006.
- 61. G. Leroy and T. C. Rindflesch. "Using Symbolic Knowledge in the UMLS to Disambiguate Words in Small Datasets with a Naive Bayes Classifier," MedInfo, San Francisco, 2004.
- 62. G. Leroy, H. Chen, J. Martinez, S. Eggers, R. Falsey, K. Kislin, Z. Huang, J. Li, J. Xu, D. McDonald, and G. Ng. "Genescene: Biomedical Text and Data Mining," presented at the Third ACM+IEEE Joint Conference on Digital Libraries (JCDL), May 27-31, 2003, Houston, Texas.
- 63. G. Leroy and H. Chen, "Filling Preposition-based Templates to Capture Information from Medical Abstracts," presented at the Pacific Symposium on Biocomputing (PSB), Kaua'i, pp 350-361, January 2002.
- 64. G. Leroy and H. Chen. "MedTextus: An Ontology-enhanced Medical Portal," presented at the Workshop on Information Technology and Systems (WITS), December 2002.
- 65. P. B. Lowry, H. W. Anderson, D. C. Wilson, G. Leroy, and L. Lin, "MIS Legitimacy and the Proposition of a New Multi-dimensional Model of MIS," presented at the 3rd Annual Conference of the Southern Association for Information Systems (SAIS), Atlanta, GA 2000.
- 66. G. Leroy, K. M. Tolle, and H. Chen, "Customizable and Ontology-Enhanced Medical Information Retrieval Interfaces," presented at the IMIA WG6 Triennial Conference on Natural Language and Medical Concept Representation, Phoenix, Arizona, December, 1999.
- 67. G. d'Ydewalle, G. Leroy, and P. v. Diepen, "*Using Peripheral Information in Processing Objects in Scenes*," presented at the XXVI International Congress of Psychology, Montréal, Canada, 1996.

# CONFERENCE PROCEEDINGS: SHORT PAPERS, POSTERS, AND DEMONSTRATIONS

- 1. P. Harber, C.R. Woolsey, G. St Onge, G. Leroy, S. Rains, and D. Kauchak." GenAI Facilitated Precision Communication for Occupational Lung Disease" [abstract]. Am J Respir Crit Care Med 2025;211:A4209. https://doi.org/10.1164/ajrccm.2025.211.Abstracts.A4209 (Poster/Abstract)
- 2. S. Lee, G. Leroy, D. Kauchak, and M. Just, "Role of Dependency Distance in Text Simplification: A Human vs ChatGPT Simplification Comparison", Boston, AMIA Summit, March 2024. (poster)
- 3. Yue Guo, Trevor Cohen, Wei Qiu, Sheng Wang, Gondy Leroy, "*Retrieval-Augmented Generation of Lay Language Background Explanations*", AMIA Fall Symposium, New Orleans, November 2023. (poster)
- 4. Hyunju Song, Yang Gu, Fariba M. Donovan, Gondy Leroy, and John N. Galgiani, "Automated Biomedical Lexicon Creation with Graph Search for Word Embeddings", IEEE CHASE, Washington DC, November 2021.
- 5. Raber M, Warner EL, Leroy G, Crane T, Basen-Engquist K, Badger T. "Cancer-related nutrition and meal planning content on Pinterest". American Society of Preventive Oncology annual meeting. March 2021. (poster)

- 6. Warner EL, Raber M, Leroy G, Crane T, Basen-Engquist K, Badger T. "Use of academic citations in cancer nutrition misinformation on Pinterest", Society of Behavioral Medicine annual meeting. April 2021. (poster)
- 7. Warner EL, Raber M, Leroy G, Crane T, Badger T, Basen-Engquist K. "*Cancer-related Nutrition and Meal Planning Content on Pinterest*". NIH Precision Nutrition Research Gaps and Opportunities Workshop. January 2021. (poster)
- 8. Warner EL, Raber M, Crane T, Leroy G, Basen-Engquist K, Badger T, "Chemo Moonshine": Cooking up Cancer Care on Pinterest, Presented at Arizona Cancer Center Annual Retreat, October 2020. (abstract)
- 9. N. Li, G. Leroy, F. Donovan, J.N. Galiani, and K. Ellingson, "A Pilot Study of Valley Fever Tweets", 6th Decennial International Conference on Healthcare Associated Infections, March 2020. [Accepted for Publication]
- 10. Y. Gu, G. Leroy. "Large-scale Text Analysis of Electronic Health Records for Autism Spectrum Disorder", Women in Data Science Tucson Conference (WiDS-Tucson), online, April 17, 2020. (Poster).
- 11. Y. Gu and G. Leroy, "Understanding Limitations of Deep Learning for Text in a Low-Resource Domain: A Case Study with Autism Diagnostic Criteria Detection from EHR", HITS Workshop, Munich, Germany, December 2019.
- 12. K. Ellingson, F. Ramadan, J. Pu, F. Donovan, J. Galgiani, and G. Leroy, "Valley Fever Phenotypic Presentation: Exploration of a Precision Medicine Approach to Clinical Decision Support", Reimagine Health: Is my fate in my genes?, Phoenix, November 20, 2019.
- 13. Y. Gu and G. Leroy, "Classification with Feature and Algorithm Machine Learning Ensembles for Autism Spectrum Disorders", Conference on Health IT and Analytics (CHITA), Washington DC, November 14-15, 2019.
- 14. Y. Gu and G. Leroy, "Automated Training Data Discovery and Labelling for Machine Learning in a Low Resource Domain", INFORMS, Seattle, October 2019
- 15. M. Pei, G. Leroy, D. Kauchak, M. Szep and A, Szep, "Splitting Sentences for Text Simplification: A Machine Learning Approach", AMIA Informatics Summit, March 2018.
- 16. D. Kauchak, G. Leroy and M. Grueter, "Demo: An Online Evidence-based Text Simplification Editor for Medical Text", Submitted to Workshop on Information Technologies and Systems (WITS) Demo Sessions, December 16-18, Santa Clara, USA.
- 17. Y. Gu and G. Leroy, "A Classification Artifact to Support Mental Health Surveillance: A comparison of feature and classifier ensembles", Accepted Poster, Workshop on Information Technologies and Systems (WITS), December 16-18, Santa Clara, USA.
- 18. G. Leroy, M. Li, S. Rains, N. Kloehn, D. Kauchak, and D. Revere, "Writing for Impact The Influence of Features in Medical Texts on Comprehension, Perceived Severity and Perceived Susceptibility of Developing the Condition," Conference on Health IT and Analytics (CHITA), November 3-4, Washington, DC, 2017.
- 19. G. Leroy, B. A. Navarrete, S. Colina, D. Kauchak, "Spanish Text Simplification Using Term Familiarity: Applying Principles from English Text Simplification," AMIA Fall Symposium, November 2017, Washington DC.
- 20. D. Revere, P. Mukherjee, D. Kauchak, and G. Leroy, "Creating a Corpus Resource for Text Simplification Research and Development," AMIA Fall Symposium, November 2017, Washington DC.
- 21. G. Leroy, Y. Gu, S. Pettygrove and M. Kurzius-Spencer, "Automated Lexicon and Feature Construction using Word Embedding and Clustering for EHR Classification", 22nd International Conference on Applications of Natural Language to Information Systems, Belgium, June 22-24, 2017.
- 22. D. Kauchak, G. Leroy and M. Just, "*Grammar Frequency and Simplification: When Intuition Fails*," AMIA Fall Symposium, Chicago, November 2016. (**Distinguished Poster Award**)
- 23. G. Leroy, J. Koolippurackal, S. Swami, and P. Harber, "Reviewing Asthma-related Grey Literature and Personal Opinions on Twitter using LDA and CTM Clustering", AMIA Fall Symposium, Chicago, November 2016.
- 24. D. Revere, G. Leroy and J. Baseman, "What's the message? A NLP analysis of public health information sent by SMS", Seventeenth International Conference on Grey Literature A new wave of textual and non-textual grey literature, December 1-2, Amsterdam, Netherlands, 2015.

- 25. G. Leroy, M. Kurzius-Spencer, and S. Pettygrove, "Using Natural Language Processing for Autism Trigger Extraction", Accepted for Publication at AMIA 2014.
- 26. J. Harwell, G. Leroy, M. Kwak, and J.D. Martinez, "Comparison of Lay and Professional Search Diagrams with Implications for a Biomedical Search Engine Design", American Medical Informatics Association (AMIA) Fall Symposium, Chicago, IL, November 3-7, 2012.
- 27. G. Leroy, J. Gutierrez, and H. Seung, "Evidence of Using a Mobile Device for Communication with Children with Autism: Lessons Learned and Critical Obstacles", American Medical Informatics Association (AMIA) Fall Symposium, Chicago, IL, November 3-7, 2012.
- 28. G. Leroy, D. Kauchak and W. Coster, "Systematic Grammatical Analysis of Easy and Difficult Medical Text", American Medical Informatics Association (AMIA) Fall Symposium, Chicago, IL, November 3-7, 2012.
- 29. M. Kwak, G. Leroy and J. Martinez, "A Pilot Study of a Predicate-based Vector Space Model for a Biomedical Search Engine", IEEE International Conference on Bioinformatics & Biomedicine (BIBM11), Atlanta, Georgia, USA, Nov. 12-15, 2011.
- 30. G. Leroy, "Old and New Readability Metrics and their Relation to Text Difficulty", IHA's Ninth Annual Health Literacy Conference Health Literacy in the Real World: Programs & Solutions That Work, Irvine, California, May 6-7, 2010.
- 31. G. Leroy and G. De Leo, "The PixTalk Communication System a Smartphone Application and Companion Website for the Improvement of Communication Skills of Children with Autism", mHealth Summit, Washington, DC, November 9-10, 2009.
- 32. T. Miller and G. Leroy, "Visualization of Health Information with Predications Extracted Using Natural Language Processing and Filtered Using the UMLS", American Medical Informatics Association (AMIS), Annual Symposium, Washington DC, November, 2008.
- 33. G. De Leo and G. Leroy, "An Online Community for Teachers of Children with Autism to Support, Observe, and Evaluate Communication Enabled with Smartphones", American Medical Informatics Association (AMIA) Annual Symposium, Washington DC, November, 2008.
- 34. S. Goryachev, Q. Zeng-Treitler, C. Arnott-Smith, A. Browne, G. Divita, A. Keselman, G. Leroy, and R. Figueroa, "Making Primarily Professional Terms More Comprehensible to the Lay Audience," American Medical Informatics Association (AMIA) Annual Symposium, Washington DC, November 8-12, 2008.
- 35. Iriberri, C.H. Ku, and G. Leroy, "Enabling Synergy between Psychology and Natural Language Processing for e-Government: Crime Reporting and Investigative Interview System", Ninth International Conference on Digital Government Research (DG.O 2008), May 18-21, 2008, Montreal, Canada.
- 36. G. Leroy, G. De Leo, F. Moss, J. Fryer, and S. M. Robb, "An Online Community for Teachers to Support, Observe, Collect and Evaluate Assisted Communication with Children with Autistic Spectrum Disorders who use Smartphones as Communication Devices," Workshop on Intelligent Systems for Assisted Cognition, October 12-13, 2007, Rochester, New York.
- 37. G. Leroy, J. Huang, S. Chuanga, M. Charlop-Christy, "*Communication Software using Pictures for use with Pocket PCs*," American Medical Informatics Association Fall Symposium, October 22-26, 2005, Washington DC.
- 38. G. Leroy, S. Chuang, J. Huang, and M. Charlop-Christy, "*Digital Libraries on Handhelds for Autistic Children*," presented at the Fifth ACM+IEEE Joint Conference on Digital Libraries (JCDL-2005), June 7-11, 2005, Denver, Colorado.
- 39. G. Leroy, T. C. Rindflesch, B. Libbus, H. Kilicoglu, and H. Chen, "A Syntactic Parser with Semantic Filtering for Biomedical Text," Pacific Symposium on Biocomputing (PSB), 2004.
- 40. G. Leroy, H. Chen, J. D. Martinez, S. Eggers, R. R. Falsey, K. L. Kislin, Z. Huang, J. Li, J. Xu, D. M. McDonald, and G. Ng. "Genescene: Biomedical Text and Data Mining," presented at the Third ACM+IEEE Joint Conference on Digital Libraries (JCDL-2003), May 27-31, 2003, Houston, Texas

- 41. B. Zhu, G. Leroy, H. Chen, and Y. Chen, "MedTextus: An Intelligent Web-Based Medical Meta-Search System," presented at the ACM and IEEE Joint Conference on Digital Libraries, Portland, OR, 2002.
- 42. K. Tolle, G. Leroy, R. Sewell, Y. Fang, D. Roussinov, P. Z. Stavri, and C. Chen, "Medical Information Access for the New Millennium: UMLS-Enhanced Semantic Parsing and Personalized Medical Agent," presented at Fourth ACM Conference on Digital Libraries, Berkeley, CA, 1999.
- 43. G. Leroy, W. Schaeken, and G. d'Ydewalle, "Working Memory and Validity, Content and Believability of Syllogisms," presented at the Annual Meeting of the Belgian Psychological Society, Brussels, May 10, 1996.
- 44. G. Leroy, and K. Lamberts, "Syllogism Solving Under Time Pressure," presented at the Annual Meeting of the Belgian Psychological Society, Brussels, May 10, 1996.

## **BOOK CHAPTERS**

- 1. A. Keselman, D.R. Kaufman, C. A. Smith, G. Leroy, "Science Education as a Barrier Against "Fake Health News", in "Science|Environment|Health,", Part of the Contributions from Science Education Research book series (CFSE, volume 10) 2nd Edition, Springer. P. 225-250, 2021.
- 2. J. Harwell, C. Pentoney, and G. Leroy, "Finding and Understanding Medical Information Online", in Information Technologies for Patient Empowerment in Healthcare, Eds. Adela Grando. November, 2014.
- 3. G. Leroy, "Search Engine Interfaces", in Internet Policies and Issues, Volume 7, Ed. B.G. Kutais, Nova Science Publishers, 2010. (ISBN 978-1-61668-745-8)
- 4. C. Gonzales, G. Leroy, and G. De Leo, "*Augmentative and Alternative Communication Technologies*", Handbook of Research on Developments in e-Health and Telemedicine: Technological and Social Perspectives, Eds., M. Manuela Cunha, Antonio Tavares and Ricardo Simoes, 2009. (ISBN: 978-1-61520-670-4)
- 5. J. Gutierez and G. Leroy, "Using Decision Trees to Predict Crime Reporting," in Advanced Principles for Improving Database Design, Systems Modeling, and Software Development, Eds, J. Erickson and K. Siau, IGI Global, p. 132 145, November, 2008. (ISBN-13: 9781605661728)
- 6. G. Leroy, "*Improving Health Literacy with Information Technology*," in Encyclopaedia of Healthcare Information Systems, Ed., N. Wickramasinghe, Idea Group, Inc, 2008.
- 7. D. M. McDonald, H. Su, J. Xu, C.-J. Tseng, H. Chen, and G. Leroy, "*Genepathway Text Mining and Visualization*," in Medical Informatics: Advances in Knowledge Management and Data Mining in Biomedicine, Eds. H. Chen, S. Fuller, and A. McCray, 2005.

## WORK UNDER REVIEW / IN PROGRESS

- 1. Gondy Leroy, Prakash Bisht, Sai Madhuri Kandula, Nell Maltman, Sydney Rice, "Deep learning for autism detection using clinical notes: an evaluation of transfer learning for a transparent and black-box approach." Artificial Intelligence in Medicine (submitted Sept, reviewers assigned Jan), Revision Under Review (since May 2025).
- 2. S. Madipalli and G. Leroy, "Comparing RAG LLM Architectures for Health Information Tailoring", Submitted as a late-break poster to AMIA.
- 3. C. D. Grubb, B. Ge, G. Leroy, A. Singh, E. Smith, "Emergency Room Patient Cost Prediction Chatbot", Submitted as a late-break poster to AMIA.
- 4. Steve Rains, Arif Ahmed, and Gondy Leroy, "*Text Comprehension Metrics to Replace Readability Formulas*," To be submitted to Patient Education and Counseling.
- 5. Gondy Leroy, Sumi Lee, Sai Madhuri Kandula, Chancellor Woolsy, Prosanta Barai, Nell Maltman, Sydney Rice, Joshua Rothman, "Deep learning approaches to compare of lay and clinical descriptions of behaviors indicating autism spectrum disorder (ASD)", Working document.

6. H. Nimbarte, G. Leroy, "Age-Robust Modeling of Clinical ASD Dialogues: Pooled vs. Age-Specific Fine-Tuning and an Age-Aware Remedy", to be submitted to IEEE ICHI.

## PUBLICATIONS – EDITORIAL

- 1. C. Angst, A. Dennis, E. Karahanna, and G. Leroy, Introduction to the Special Section on Information Technology to Improve Mental Health, JMIS, 41 (4), 2024.
- 2. Z. Yan, G. Leroy, Q. Yin, N. R. Hardiker, and D. Zhang, "Introduction to the Special Issue on Smart and Connected Health", Information & Management, July 2024.
- 3. G. Leroy, B. Tulu, and X. Liu, Introduction to the Special Issue on Design and Data Science, ACM Transactions on MIS, January 2023.
- 4. Liadh Kelly, Lorraine Goeuriot, Hanna Suominen, Tobias Schreck, Gondy Leroy, Danielle L. Mowery, Sumithra Velupillai, Wendy W. Chapman, David Martinez, Guido Zuccon, João Palotti, "Overview of the ShARe/CLEF eHealth Evaluation Lab 2014", 5th International Conference of the CLEF Initiative: Information Access Evaluation. Multilinguality, Multimodality, and Interaction, CLEF 2014, Sheffield, UK, September 15-18, 2014.
- Hanna Suominen, Tobias Schreck, Gondy Leroy, Harry Hochheiser, Lorraine Goeuriot, Liadh Kelly, Danielle L Mowery, Jaume Nualart, Gabriela Ferraro, Daniel Keim, "Task 1 of the CLEF eHealth Evaluation Lab 2014: Visual-Interactive Search and Exploration of eHealth Data", 5th International Conference of the CLEF Initiative: Information Access Evaluation. Multilinguality, Multimodality, and Interaction, CLEF 2014, Sheffield, UK, September 15-18, 2014.
- 6. G. Leroy, H. Chen and T. Rindflesch, "Smart and Connected Health", IEEE Computer, May/June 2014, 2014.
- 7. C. C. Yang, G. Leroy, S. Ananiadou, "Smart Health and Wellbeing", ACM Transactions on Management Information Systems (TMIS) Special Issue on Informatics for Smart Health and Wellbeing 4, 4, 2013.
- 8. G. Leroy, K. M. Tolle, L. Perkins, "Women and Technology: Reversing the Trends of Attrition and Obtaining a Balance", Women's Studies, 37, 173-175, 2008.
- 9. G. Leroy and H. Chen, "Introduction to the Special Issue on Decision Support in Medicine," Decision Support Systems, 43, 1203-1206, 2007.

## PUBLICATIONS - NOT PEER-REVIEWED

- 1. P. Barai, G. Leroy, P. Bisht, J. M. Rothman, S. Lee, "Crowdsourcing: Empowering Healthcare AI with Diverse Data and Data Quality Assurance", Bio5 Research and Innovation Showcase, September 2023.
- 2. G. Leroy, "Evidence-based Health Text Simplification using Natural Language Processing Algorithms", IHA's 12th Annual Health Literacy Conference, "Operational Solutions to Low Health Literacy." Irvine, California, May 2013.
- 3. G. Leroy, "*The Claremont-Scripps Computing Academy*", Unposter presented at the National Center for Women and Information Technology (NCWIT) Summit, Chicago, May 2012.
- 4. G. Leroy, J. Gutierrez, H. Seung, G. De Leo, "*Integrating Information Technology in Therapy and Life*", Autism News of Orange County and the Rest of the World, 6(1), 15-16, 2011.
- 5. C. Heins-Gonzales, G. Leroy, G. De Leo, "*Requirements Engineering using Appreciative Inquiry*", Southern California WISRD IS Research Workshop, UC Irvine, California, June 5, 2009.
- 6. G. Leroy and G. De Leo, "Communication Software for Children with Autism and their Caregivers", Autism News of Orange County and the Rest of the World, 5(1), 15.
- 7. G. Leroy, G. De Leo, C. Heins-Gonzales, P. Battagiri, "An Online Community for Teachers to Support, Observe, Collect and Evaluate Assisted Communication with Children with Autistic Spectrum Disorders who use Smartphones as Communication Devices", Microsoft Research Faculty Summit, Microsoft Conference Center, Redmond, Washington, 2008.

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- 8. G. Leroy and G. De Leo, "Using SmartPhones to Enable Interaction and Communication with Autistic Children", Microsoft Research Faculty Summit, Microsoft Conference Center, Redmond, Washington, 2007.
- 9. G. Leroy, J. Huang, S. Chuang, M.H. Charlop-Christy, "*Non-Verbal Communication with Autistic Children using Digital Libraries*", IEEE Technical Committee on Digital Libraries Bulletin, Online.

# **PATENTS**

Automated identification of diagnostic criteria in natural language descriptions of patient behavior for combining into a transparent diagnostic decision, Filing Date 08/07/2024, Patent Pending.

Gamified education application for recognizing evidence of mental disorders by re-using machine learning datasets, Filing date 08/07/2024, Patent Pending.

## **BOOK**

G. Leroy, Designing User Studies in Informatics, Springer, 2011, ISBN: ISBN 978-0-85729-621-4.

## RESEARCH GRANTS AND GIFTS

#### Federal Funding

- Gondy Leroy (P.I.), Health Information Technology to Support Autism Spectrum Disorders (ASD) Risk Assessment for Early Diagnosis, \$1.55M, 2021-2026, NIMH, (R01MH124935)
- Gondy Leroy (P.I.), Audio Generation and Optimization from Existing Resources for Patient Education, \$1.4M, NLM/NIH, 2021-2026 (R01LM011975)
- Gondy Leroy (Co-I.), (P.I., Cohen, U of Washington), Professional to Plain Language Neural Translation: A Path Toward Actionable Health Information, 190K, NLM, 2022-2024 (R21LM013934-01)
- Gondy Leroy (P.I), IEEE ICHI Conference Support, NSF, \$13,980, 2021-2022.
- Gondy Leroy (P.I), IEEE ICHI Conference Support, NSF, \$14,000, 2020-2021.
- Gondy Leroy (P.I) with Mihai Surdeanu, Sydney Pettygrove, and Maureen Kelly, AHRQ, Enabling large-scale research on autism spectrum disorders through automated processing of EHR using natural language understanding, \$292K, 2017-2021 (1R21HS024988-01A1)
- Gondy Leroy (P.I.), Evidence-based Strategy and Tool To Simplify Text for Patients and Consumers, NLM/NIH, \$1.4M, 2015-2021. (R01 LM011975)
- M. Kurzius-Spencer (Co-P.I.), S. Pettygrove (Co-P.I.), Gondy Leroy (Co-I), Arizona Developmental Disabilities Surveillance Program (ADDSP), Centers for Disease Control and Prevention (CDC), \$2M, 2015-2019.
- Gondy Leroy (P.I.), National Institutes of Health / National Library of Medicine (NIH/NLM), Large-scale Evaluation of Text Features Affecting Perceived and Actual Text Difficulty, \$132,300, 2011-2013. (R03LM010902)
- Gondy Leroy (P.I.) with James Cowie (Co-I) and Stephen Helmreich (Co-I) (New Mexico State University), National Science Foundation (NSF), U3 Understanding User Understanding, \$99,988, Sept 2007 Aug 2008.
- Gondy Leroy (P.I.) with Elizabeth Wood (Co-I) (City Of Hope National Cancer Center), National Library of Medicine/National Institutes of Health (NIH/NLM), "Visualization of Consumer Health Information", \$317,514, 2005-2007. (R21)

#### **Industry Funding**

- Gondy Leroy (P.I.) with Gianluca De Leo (Old Dominion University), Microsoft Research, Using SmartPhones to Enable Interaction and Communication with Autistic Children, \$149,000, 2007-2008.
- Gondy Leroy (P.I.) with Gianluca De Leo (Old Dominion University), Microsoft Research, An Online Community
  for Teachers to Support, Observe, Collect and Evaluate Assisted Communication with Children with Autistic
  Spectrum Disorder, \$50,000, 2008.
- Gondy Leroy (P.I.), Amazon Web Services (AWS) Education Research Grant, \$6,000 credits, 2015.

## Foundation, Center, and University (internal) Grants and Gifts

- John Galgiani (P.I.), Fariba Donovan (Co-I), Gondy Leroy (Co-I), Fangwu Wei (ASU PI) Improving prediction and recognition of Arizona Valley Fever, \$750K, 2025-2028.
- Sydney Rice (P.I), Gondy Leroy (Co-I), Nell Maltman (Co-I), Interdisciplinary Approach to Diagnosing Children with Autism, PANDAS People Acting Now Discover Answers, 2025 (to be announced), 120K.
- Nell Maltman (P.I.), Gondy Leroy (Co-I), Jonathan Kevan (co-I), Collaborating with law enforcement to support interactions with autistic individuals, \$20,424, 10/1/2024-9/30/2025.
- Gondy Leroy (P.I.), A 360 Data View to Identify Children with Autism Spectrum Disorders, Eller Center for Management Innovations in Healthcare, 2024, \$5,000.
- Gondy Leroy (P.I), Dataset Creation Containing Example Behaviors of Autism Spectrum Disorders for Clinical Training, University of Arizona, Bio5, \$47,670, January 2023-July 2023.
- Jeffrey J. Rodriguez (P.I.), Gondy Leroy (co-P.I.), Data-informed Automated Classification of Lung Nodules in Chest X-Ray Images, Banner MD Anderson Cancer Center, \$67,500, 2022.
- Gondy Leroy (P.I.), Tomorrow's Leaders Equipped for Diversity, Vicky Panhuise Foundation, \$100,000, 2017-2022.
- Gondy Leroy (P.I.), Evaluating Interpretability of Machine Learning Output for Autism Spectrum Disorder Diagnostic Criteria Identification, Center for Management Innovations in Healthcare, \$2,000, 2021.
- Gondy Leroy (P.I.), The Public Reaction Mask Anger during the Coronavirus Pandemic, Eller Small Research Grants, \$2,000, 2021
- Gondy Leroy (P.I.), The Public Reaction Twitter Analysis during The Coronavirus Pandemic, \$2,220, 2020
- Gondy Leroy, Tomorrow's Leaders Equipped for Diversity, \$23,948, Microsoft, 2018.
- Gondy Leroy, Tomorrow's Leaders Equipped for Diversity, \$10,000 for Student Travel Awards to Grace Hopper Celebration of Women in Computing, Microsoft, 2017.
- Gondy Leroy (P.I.), EHR Gold Standard Dataset Creation for Autism Spectrum Disorders Surveillance Project. \$5,000, 2017.
- Gondy Leroy (P.I.), Tomorrow's Leaders Equipped for Diversity, Vicky Panhuise Foundation, \$25,000, 2016-2017.
- Gondy Leroy (P.I.) with Jennifer Unger (USC), Creation of Age Specific Language Models for Twitter, Eller College Summer Research Grants, 2,000, 2016.
- Gondy Leroy (P.I.) with Paulo Goes, Tomorrow's Leaders Equipped for Diversity, Vicky Panhuise Foundation, \$20,000, 2015-2017.
- Gondy Leroy (P.I.) with Paulo Goes, Tomorrow's Leaders Equipped for Diversity, The National Center for Women & Information Technology (NCWIT & Microsoft Research), \$10,000, 2014-2015.
- Gondy Leroy (P.I.) with Brian Hilton, Using Geographical Information Systems to Combine Structured Data and Unstructured Data from Text for Crime Analysis, Fletcher Jones Foundation, \$6,000, 2012-2013.

- Gondy Leroy (P.I.) with Kelly Hewit (Scripps College, Claremont Colleges), The Claremont-Scripps Computing Academy, The National Center for Women & Information Technology (NCWIT & Microsoft Research), \$10,000, 2012-2013.
- Gondy Leroy (P.I.) with HyeKyeung Seung (California State University, Fullerton), Allergan Foundation, Continued Pilot Study to Evaluate Communication Software for Children with Autism, \$5,000, 2010-2011.
- Gondy Leroy (P.I.) with Jesse Martinez (University of Arizona), Fletcher Jones Faculty Grant, Development of the Next Generation Search Engine for Biomedicine by Combining Linguistic and Computer Science Principles, \$5,800, 2010-2011.
- Gondy Leroy (P.I.) with HyeKyeung Seung (California State University, Fullerton), Allergan Foundation, Pilot Study to Evaluate Communication Software for Children with Autism, \$2,000, 2009-2010.
- Gondy Leroy (P.I.) with Brian Hilton (CGU) and June Hilton (Claremont High School), National Center for Women in Information Technology (NCWIT & Microsoft Research), An Interdisciplinary Approach to Increase Interest in Information Technology through an Environmental Project", \$15,000, 2009.
- Gondy Leroy (P.I.), Edison International, Workshop for Women in IT Emerging Leaders, \$5,000, 2007.
- Gondy Leroy (P.I.) with Art Lee (Claremont McKenna College), BLAIS Challenge Fund Award, Workshop: Women in IT Emerging Leaders, \$8,000, 2006-2007.
- Gondy Leroy (P.I.), Fletcher Jones Foundation, "Unreported Crime Matters", \$6,000, 2006-2007
- Gondy Leroy (P.I.), Verizon Foundation, "Improving Quality of Life for Autistic Children and Their Parents Through Modern Communication Devices", \$10,000, 2005.
- Gondy Leroy (P.I.), Claremont Graduate University Infrastructure Grant, \$3,000, 2005.
- Gondy Leroy (P.I.), Parson's Foundation, "Visualization to Help Consumers Read Health Information on the Internet", \$3,000, 2004

## HONORS AND AWARDS

- AIS Women's Network Leadership Excellence Award, 2024
- Eller DEI Outstanding Faculty Award, May 2023.
- Best Associate Track Editor, Professional Development Track, ICIS, Austin Texas, November 2021.
- Featured in Women in AMIA, Podcast series, <a href="https://podcasts.apple.com/us/podcast/women-in-amia-episode-7-dr-gondy-leroys-career-path/id1453198463?i=1000446761365">https://podcasts.apple.com/us/podcast/women-in-amia-episode-7-dr-gondy-leroys-career-path/id1453198463?i=1000446761365</a>, August 2019
- Eller Professorship Award, University of Arizona, 2017 current.
- AIS Women's Network Service Award, 2018.
- Eller College of Management, Dean's Research Award, 2017.
- Recognition "Outstanding College" during my terms as Co-Chair of the Association for Information Systems Women's Network, 2018.
- Recognition "Outstanding College" during my terms as Co-Chair of the Association for Information Systems Women's Network, 2017.
- Eller Fellow Award, University of Arizona, 2015 2017.
- Meritorious Mention 2018 Best Paper Award SIG Health: Y. Gu, G. Leroy, D. Kauchak, "When synonyms are not enough: Optimal parenthetical insertion for text simplification," AMIA Fall Symposium, November 2017, Washington DC.

- Distinguished Poster Award: D. Kauchak, G. Leroy and M. Just, "*Grammar Frequency and Simplification: When Intuition Fails*," AMIA Fall Symposium, Chicago, November 2016.
- Recognition "Outstanding SIG" during my presidency of the Association for Information Systems Special Interest Group on Health (SIGHealth), 2015
- Recognition "Outstanding SIG" during my presidency of the Association for Information Systems Special Interest Group on Health (SIGHealth), 2014
- IEEE Senior Member, Institute of Electrical and Electronics Engineers, 2008.
- Best Paper Selection, IMIA Yearbook of Medical Informatics 2009, Section 6: Knowledge Representation and Management, Keselman A, Smith CA, Divita G, Kim H, Browne AC, Leroy G, Zeng-Treitler Q., Consumer Health Concepts That Do Not Map to the UMLS: Where Do They Fit?, J Am Med Inform Assoc 2008 Jul-Aug;15(4):496-505.
- Best Paper Award: T. Miller, G. Leroy, S. Chatterjee, J. Fan, and B. Thoms, "A Classifier to Evaluate Language Specificity in Medical Documents", Hawaii International Conference on System Sciences, January 2007.
- US Department of Defense, Defense Advanced Research Projects Agency (DARPA), U.S. Department of Defense, Young Investigator, Information Processing Technology Office (IPTO), 2003
- Erasmus Scholarship Recipient, European Union, The University of Birmingham (U.K.), 1996

## INVITED RESEARCH TALKS

- "Harnessing AI in Healthcare: Successes and Caution", ACHE, Phoenix, June 12, 2025.
- "Data, Model, and Validation Considerations for Transparent Decision-Making with AI: Autism Spectrum Disorders as a Use Case", 16th Annual CNaP Research Forum and Lynn Speedie Lectureship, Krieger Institute, John's Hopkins, Baltimore, March 27, 2025,
- "Decision-making with AI: Successes and Cautions", SALON, CATalyst CHATS: Riding the AI Wave, March 20, 2025
- "Where is the Fine Print? Data, Model, and Validation Considerations for using AI in Medicine", ReImagine Health Artificial Intelligence in Medical Practice and Research, 7<sup>th</sup> Annual University of Arizona College of Medicine Phoenix Research Symposium, December 11, Phoenix.
- "Transparent deep learning to identify autism spectrum disorders (ASD) in EHR using clinical notes.", JAMIA Journal Club, August 8, 2024.
- "An Alternative Approach to Transparent Decision-Making with Deep Machine Learning Algorithms in Mental Health", Oregon State University, May 3, 2024.
- "Transparent machine learning for diagnosis of autism spectrum disorders", VA visit to University of Arizona, March 2024
- "The Many Aspects of Data Science Medical Informatics Examples", Women in Data Science, March 29, 2024.
- "Transparent machine learning for diagnosis of autism spectrum disorders", Eller Business Analytics Program, January 2024.
- "Transparent machine learning for diagnosis of autism spectrum disorders: An overview of our approach and results, obstacles, and (attempted) creative solutions", UCSD Current Trends in Biomedical Informatics, October 27, 2023
- "A transparent machine learning approach to identifying children at risk for Autism Spectrum Disorders using unstructured data in EHR", the University of Arizona, College of Medicine-Phoenix, Grand Rounds April 19, 2023.

- "Machine learning algorithms and ensembles using clinical notes for early diagnosis of autism spectrum disorders", Front Range of Machine Learning Alliance Seminar Series (FoRMLA), March 31, 2023.
- "Natural Language Processing and Machine Learning to Diagnose Autism Spectrum Disorders (ASD): Unique Obstacles and Creative Solution", University of Arizona, Autism Collective, November 30, 2022.
- "ASD Early Referral: Human-Computer Collaboration", Mariposa Health System, Nogales, Arizona, May 2022.
- "ASD Surveillance: Human-Computer Collaboration", CDC ADDM On-site Visit, Phoenix, AZ, May 2022.
- Panel Member, DESRIST Doctoral Consortium, 2021.
- Panel, with Catherine Arnott Smit, and David Kaufman, and Alla Keselman, "Would You Share this Video? Fighting Fake Health News with e-Health Literacy," COVID-19 Infodemic Symposium, Hosted by the Network of the National Library of Medicine (NNLM) (116 attendees during presentation), April, 2021
- "Leveraging the Free Text in EHR for Diagnosing and Surveillance of Autism Spectrum Disorders (ASD)", Digital Health Interest Group, University of Arizona, February 18, 2021
- "Generating Data from EHR Free Text for Autism Spectrum Disorders Surveillance Support", Charles Drew University, January 2021.
- "Design and Development of Decision Support Tools for Surveillance of Autism Spectrum Disorders (ASD) using EHR", Cognitive Science, University of Arizona, October 2020.
- "Generating Data from Text in EHR (with Autism Spectrum Disorders as an Example)", Department of Infectious Diseases, College of Medicine, University of Arizona, April 2020.
- "Information Technology to Support Diagnosing Autism Spectrum Disorders," The Autism and Developmental Disabilities Monitoring (ADDM) Network, January 22, 2020.
- "Promise and opportunity for natural language processing to generate new data from EHR: Autism Spectrum Disorders Example, "Department of Epidemiology and Biostatistics, College of Public Health, Department of Epidemiology and Biostatistics, College of Public Health, November 20, University of Arizona.
- "Data sets without ground truth: Creating data from behavioral descriptions in text", Women in Data Science, Tucson Edition, April 4, 2019.
- "Automating diagnostic criteria annotation and case decisions for autism spectrum disorders based on the free text in EHR", Clinical Informatics Grand Rounds, College of Medicine Phoenix, March 20, 2019.
- "Classification with Machine Learning in Low Resource Domains", 4th Annual Research Workshop, Arizona State University, Feb 21-25, 2019.
- "NLP Research Projects Overview", Linguistics Department's New Student Recruitment Weekend, February 15, 2019.
- "A Design Science Approach to Interdisciplinary Problem Solving", iSchool, University of Washington Seattle, February 13, 2019.
- "Diagnostic Criteria Annotation and Case Status Assignment for Autism Spectrum Disorders in Electronic Health Records", Catholic University of Leuven (Belgium), Computer Science, May 2017.
- "A Data-driven, Text Mining Approach to Text Simplification", Arizona State University, Department of Biomedical Informatics, April 2017.
- "Using Information Technology to Simplify Text for Patients", The University of Tampa, Tampa, Florida, December 2016.
- "Medical Text Simplification: New Features and Old Myths", Ghent University, Faculty of Psychology and Educational Sciences, Department of Experimental Psychology (Belgium), December 2015

- "Semi-Automated Simplification of Medical Text Using NLP and Text Mining", Catholic University of Leuven, Faculty of Economics and Business, Management Informatics (Belgium), November 2015
- "Medical Text Simplification: New Features and Old Myths", Ghent University, Department of Management Information Science and Operation Management (Belgium), November 2015
- "Medical Text Simplification: New Features and Old Myths", Eller Center for Management Innovations in Health Care, November 18, 2015.
- "Using Text Analytics for Development of Text Simplification Software", Baruch College, New York, November 10, 2015
- "Evidence –based Medical Text Simplification through Text Mining", UA South Campus and IEEE Sierra Vista Chapter, September 2015.
- "Text Mining and Big Data to Improve Health Literacy through Text Simplification", Virginia Tech, June 4, 2015.
- P. Harber and G. Leroy, "Crowd sourcing population data: Using Amazon Mechanical Turk and Natural Language Processing for Work-Related Asthma", Pulmonary Research Conference, Feb 2015 (conference presentation).
- "Understanding, Processing or Improving Text and Communication in Healthcare", College of Public Health, Community, Environment and Policy Division, Faculty Seminar, November 15, 2013
- "Evidence-based Reduction of Perceived and Actual Text Difficulty Using Natural Language Processing," Southern California Workshop on Clinical Text Analysis and Visualization, University of California San Diego (UCSD), January 30, 2013.
- "Designing User Studies," Doctoral Consortium, Seventh International Conference on Design Science Research in Information Systems and Technology (DESRIST), Las Vegas, May 14-15, 2012.
- "Transdisciplinary Solutions to Communication Problems in Healthcare and Biomedicine," at the MIS Seminar Series, University of Arizona, May 11, 2012.
- A Triple-based Biomedical Search Engine," at the Pomona College Computer Science Colloquium, March 8, 2012.
- "Using a Predicate-based Biomedical Search Engine for Going Beyond Keyword-based Search," at the Lunch and Learn Seminar, Zynx Health, February 29, 2012.
- "Toward the Next Generation Biomedical Search Engine," at the Current Trends in Biomedical Informatics Seminar, Biomedical Informatics, University of California at San Diego, February 20, 2012.
- "Assisted Communication with Children with Autistic Spectrum Disorder, at the IJCAI 2009 Workshop on Intelligent Systems for Assisted Cognition, Pasadena, July 12, 2009.
- "*PixTalk*," Chapman University, Guest Presentation in the Assessment and IEP Development Course, Chapman University, Victorville, California, May 7, 2009.
- "Technology Assisted Information and Communication Exchange," University of California Irvine, November 7, 2008
- "Information Technology for Information Exchange for Wellness and Health, "Charles Drew University of Medicine and Science, October 03, 2008
- "Health Information Understanding by Laymen", WISRD 2.0, University of Southern California, June 13, 2008
- "An Online Community for Teachers to Support, Observe, Collect and Evaluate Assisted Communication with Children with Autistic Spectrum Disorders who use Smartphones as Communication Devices," Workshop on Intelligent Systems for Assisted Cognition, Rochester, New York, October 12 13, 2007.
- "Semantic Graph Mining, "National Library of Medicine, National Institutes of Health, November 17, 2006.
- "Facilitating Understanding and Retention of Health Information," Microsoft eScience Workshop at The Johns Hopkins University, October 13 15, 2006.

- "Knowledge Discovery," CIO Roundtable, Claremont, CA, September 13, 2005
- "Improving Quality of Life and Therapy for Autistic Children and their Caregivers through Modern Communication Devices," Southwest Autism Research and Resource Center (SARRC), Phoenix, AZ, May 17, 2005.
- "Intelligent and Scalable Text and Data Mining Applications, "DARPA Information Processing Technology Office Conference, November 2003, Arlington, Virginia, 2003.

# GUEST LECTURES, TUTORIALS, PANELS, & WORKSHOPS

- AII (Artificial Integrative Intelligence) from Promise to Practice: AI's Role in Shaping the Integrative Medicine of the Future, Panelist, Andrew Weil Center for Integrative Medicine's Integrative Medicine Summit, March 13, 2026.
- Using Modern Data Science Approaches to Enable HSR Innovation, Panelist, Academy Health Annual Research Meeting, Baltimore, July 2, 2024.
- CliniSys Panel, Clinisys Customer Summit, Phoenix April 2024.
- "AI, ML, LLMs, and NLP," Komatsu (mini-lecture), January 2024.
- With Kai Larsen, "Evaluation of Artifacts in Design Science," Half-day Tutorial at the 53rd Hawaii International Conference on System Sciences (HICSS), January 2024.
- Career Chat, University of Arizona, Women's Network, General Meeting, September 26, 2023.
- "AI, ML, LLMs, and NLP", Speaker, Southern Arizona Leadership Council, September 21, 2023.
- "Demystifying Natural Language Processing for Health Researchers", Panel Member, Academy Health's 2023 Annual Research Meeting (ARM), Seattle, WA, June 24-27, 2023
- Evaluating your Health IT Artifact, Tutorial, Public Health Informatics and Technology Conference (PHIAT), Tutorial, San Diego, June 1-3, 2023
- "Machine learning algorithms and ensembles using clinical notes for early diagnosis of autism spectrum disorders" Guest Lecture, Healthcare Analytics Course, Bentley University, March 2023.
- With Kai Larsen, "Evaluation of Artifacts in Design Science", Half-day Tutorial at the 52th Hawaii International Conference on System Sciences (HICSS), January 2023.
- "Global Pathways", Panelist, Part of Seminar Series Human Being: A Multidimensional Journey, March 3, 2022, University of Arizona
- G. Leroy, "A practical tutorial discussion evaluation of IT Artifacts with controlled experiments in the design science framework", IEEE ICHI, Tutorial, December, 2020.
- "Evaluating Artifacts using Experiments as part of the Design Science Framework", RCIS 2019 13th International Conference on Research Challenges in Information Science, 29-31 May 2019, Brussels, Belgium
- "Evaluation of Artifacts in Design Science", Half-day Tutorial at the 52th Hawaii International Conference on System Sciences (HICSS), 2018, 2019.
- "Culture, Gender & Accessibility: Transforming Learning & Leadership Diversity in IT", with Nanette Levinson, Half-day Workshop at the 49th Hawaii International Conference on System Sciences (HICSS), Kauai, Hawaii, January 5-8, 2016.
- "Data Mining", Online Guest Lecture, College of Public Health, University of Arizona, 2015.
- "Clinical Decision Support Systems", Online Guest Lecture, College of Public Health, University of Arizona, 2014.
- "Designing User Studies in Informatics," Half-day Tutorial at the 47th Hawaii International Conference on System Sciences (HICSS), Big Island, Hawaii, January 4-9, 2014.

- "Designing User Studies in Informatics," Two-day Tutorial at the Aalto University, School of Business, Finland. Planned for March 18-19, 2013.
- "Designing User Studies in Informatics," Half-day Tutorial at the 46th Hawaii International Conference on System Sciences (HICSS), Grand Wailea, Maui, Hawaii, January 7-10, 2013.
- "Designing User Studies in Informatics," Half-day Tutorial at the 45th Hawaii International Conference on System Sciences (HICSS), Grand Wailea, Maui, Hawaii, January 4-7, 2012.
- "Designing User Studies in Informatics," Half-day Tutorial at the International Conference on Asia-Pacific Digital Libraries (ICADL 2011), Beijing, China, October 24-27, 2011.
- "Designing User Studies in Informatics," Half-day Tutorial at the ACM-IEEE Joint Conference on Digital Libraries (JCDL), Ottawa, Canada, June 13-17, 2011.
- "*Text Mining*," Guest Lecture in Transdisciplinary Shakespeare, Graduate Course, School of Arts and Humanities English Department (CGU), November 2009.
- "Women in IT, Guest Lecture in, "Inclusion and Human Development in Education in a Diverse Society", Graduate Course, School of Education (CGU), April 15, 2008.

### **PRESS**

- Data Mining Collaboration Brings Researchers Together, October 31, 2022,
   <a href="https://healthsciences.arizona.edu/connect/features/1022/data-mining-collaboration-brings-researchers-together">https://healthsciences.arizona.edu/connect/features/1022/data-mining-collaboration-brings-researchers-together</a>
- Inside Tucson Business, People in Action, September 2021, <a href="https://www.insidetucsonbusiness.com/people\_in\_action/people-in-action/article\_9398d5fc-17f1-11ec-b249-b3dacad0e24a.html">https://www.insidetucsonbusiness.com/people\_in\_action/people-in-action/article\_9398d5fc-17f1-11ec-b249-b3dacad0e24a.html</a>
- AAUW Tucson Bulletin Featured profile on https://www.instagram.com/p/Bvsc7U-AzLL/.
- The Daily Wildcat, Eller Researcher Uses Skills to Hunt Autism Data, November 2017.
- VRM Media Natural Practitioner, UA Eller Research Team Receives \$1.4 Million Grant to Create Free Health Too, October 2015.
- Arizona Public Media, UA Project Aims to Untangle Medical Jargon for Patients, October 2015.
- Awesome Apps for Autism, The Autism Research Foundation, January 2014
- The Student Life, Scripps Academy Receives Grant for Computing Project, 2012.
- Microsoft Research, Mobile Device Uses Images to Help Children with Autism Interact. Microsoft Case Studies.
- Claremont Courier, CGU Project Merges Technology and the Environment by Landus Rigsby, Saturday, February 7, 2009.
- Chronicle of Higher Education, The Wired Campus, January 30, 2008.
- CNN Interview, Women in IT, April 2007, Headline News, Local Edition, aired May 2007 (10 times).

#### **MEDIA**

- NLM Extramural Video Series, recorded fall 2024, Autism project, Not yet public: https://vimeo.com/1044348103/0fc96ed97a?ts=0&share=copy
- 2024, July, Algorithms and Autism Using AI to Identify Autism in Children (YouTube: www.youtube.com/watch?v=d8tx66kTv8o)
- 2023, Summer, BIO KEYSS student George Diaz, <a href="https://www.youtube.com/watch?v=F26roOYxNCw&t=1293s">https://www.youtube.com/watch?v=F26roOYxNCw&t=1293s</a>
- 2023, Summer, BIO5 KEYS student Riva Nalla, https://www.youtube.com/watch?v=F26roOYxNCw&t=4253s

- 2022, Summer, BIO5 KEYS student Sneha Lakamsani, https://www.youtube.com/watch?v=MOKDm8Eyjvg&t=3679s
- 2022, Summer, BIO% KEYS student Yashas Raman, https://www.youtube.com/watch?v=MOKDm8Eyjvg
- 2018, October, Enabling Large-scale Research on ASD through Automated Processing of EHR (YouTube: www.youtube.com/watch?v=cFPSCq1jTXY

# EDITORIAL POSITIONS (SEPARATE FROM LEADERSHIP)

#### Ongoing

- 2017-Present, Editorial Board Member, Journal of Business Analytics.
- 2016-Present, Associate Editor, Journal of Healthcare Informatics Research.
- 2012-Present, Editorial Review Board, Health Systems.
- 2009-Present, Editorial Review Board, International Journal of Social and Organizational Dynamics in IT.
- 2003-Present, Editorial Review Board, Journal of Database Management.

#### Other

- Guest Editor (with Alan Dennis, Elena Karahanna), Journal of Management Information Systems (JMIS), Special Section on Information Technology (IT) to Improve Mental Health, 2024.
- Guest Editor (with Dongson Zhang, Nick Hardiker, Zhijun Yan), Information & Management, topic "Smart and Connected Health", 2024.
- Guest Editor (with Bengisu Tule and Xiao Liu), ACM Transactions on Management Information Systems (review phase of papers), topic "Design and Data Science in Healthcare", 2022.
- Professional Development, Track Associate Editor, ICIS 2021, Austin Texas, December 2021.
- Track Associate Editor, ECIS Health Information Technology and IS for Healthcare, 2019.
- Associate Editor IS Healthcare Track, ICIS 2019
- Editorial Review Board, MISQ Special Issue "Role of Information Systems and Analytics in Chronic Disease Prevention and Management", 2017 2018.
- Guest Editor with H. Chen (UA) and T. Rindflesch (NLM), Special Issue IEEE Intelligent Systems on Smart and Connected Health, 2014.
- Guest Editor with C. Yang (Drexel University, USA) and S. Ananiadou (University of Manchester, UK), Special Issue in ACM Transactions on Management Information Systems (ACM TMIS) on Informatics in Smart Health and Wellbeing, (papers due October 2012), 2013.
- Editorial Board, MISQ, Special Issue on Business Intelligence Research. (Papers Due 2010), 2012.
- Associate Editor IT in Healthcare Track, International Conference on Information Systems (ICIS) 2011, Shangai, China, December 4-7, 2011.
- Associate Editor, 18th European Conference on Information Systems (ECIS), Pretoria, South Africa, June 6-9 2010.
- Associate Editor, 17th European Conference on Information Systems (ECIS), Verona, Italy June 8-10, 2009
- Associate Editor, Information Systems Development Track, 16th European Conference on Information Systems (ECIS), Galway, Ireland, June 9 11, 2008.
- Guest Editor, Special Issue on Women and Technology: Reversing the Trends of Attrition and Obtaining a Balance, Women's Studies (Submission deadline March 31, 2007), 2007.
- Guest Editor, with H. Chen, Special Issue on Decision Support in Medicine, Decision Support Systems, 2004.

#### OTHER CONFERENCE SERVICE

- Doctoral Consortium Mentor and Panel Member, AMCIS August 10-14, Minneapolis, 2022.
- Program Committee, 30th European Conference on Information Systems ECIS 2022
- Doctoral Consortium Dissertation Judge, ICIS, December 2021.
- Program Committee, Women in Data Science (WiDS), March, 2021.
- Doctoral Consortium, Mentor, 41st International Conference on Information Systems (ICIS), India, [Online], 2020.
- Program Committee, Women in Data Science (WiDS), April 17, 2020.
- Program Committee, DESRIST, International Conference on Design Science Research in Information Systems and Technology (DESRIST), Chennai, India, 2018.
- Doctoral Consortium, Panel Member, August 10, Boston, AMCIS 2017.
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE-ISI), 2015.
- Program Committee, ICEDEG 2015 2nd International Conference on eDemocracy & eGovernment, Quito, Ecuador, 08 10 April 2015.
- Program Committee, Celebration of Women in Computing in Southern California, SoCal-CWIC 2014.
- Program Committee Member, 14th Annual International Conference on Digital Government Research (dg.o 2014),
   June 17-20, 2013, Quebec City, Quebec, Canada
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE-ISI), Seattle, Washington ,June 4-7, 2013.
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE-ISI), Washington DC, June 11-14, 2012.
- Program Committee, DG.O 13th Annual International Conference on Digital Government Research Bridging Research and Practice University of Maryland, College Park, MD, College Park, MD June 4-7, 2012.
- Senior Program Committee Member, ACM International Health Informatics Symposium (IHI), Miami, FL, USA, January, 2012.
- Program Committee, DG.O 12<sup>th</sup> Annual Digital Government Innovation in Challenging Times, College Park, MD, June 12-15 2011.
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI), Beijing, China, July 10-12, 2011.
- Program Committee, DG.O 2010 11th Annual International Conference on Digital Government Research: Public Administration Online: Challenges and Opportunities, Puebla, Mexico, May 17-20, 2010.
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (ISI), Dallas, 2009.
- Program Committee, DG.O 2009 10th Annual International Conference on Digital Government Research: Social Networks: Making Connections between Citizens, Data and Government, Puebla, Mexico, May 17, 2009.
- Program Committee, Fourth International Conference on Persuasive Technology, Claremont, California, April 26-29, 2009.
- Program Committee, European Conference on Intelligence and Security Informatics (EuroISI), Copenhagen, Denmark, December 3 - 5, 2008
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI), Taipei, Taiwan, 2008, June 17-20.

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- Program Committee, 2nd International Conference on Design Science Research in Information Systems and Technology (DESRIST), Pasadena, 2007
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI), New Jersey, 2007
- Program Committee, Third Annual Kay-CGU Symposium, Pacific Edge E-Health Innovations: Linking Research, Practice and Policy to Benefit Consumers and Communities, December 1-2, 2006.
- Scientific Review Committee, MEDNET 11th WorldCongress on Internet in Medicine, Toronto, Ontario, October 13-20, 2006
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI), San Diego, 2006
- Program Committee, 1st International Conference on Design Science Research in Information Systems and Technology (DESRIST), Claremont, 2006
- Program Committee, First Workshop on the Science of the Artificial (WSA 2005), December 6-9, 2005, Taiwan.
- Program Committee, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI), Atlanta, Georgia, 2005.

## STUDENTS ADVISING AND MENTORING

#### **Doctoral Dissertation - Chair**

- Chancellor Woolsey, University of Arizona. MIS doctoral program, August 2023 Present.
- Prosanta Baria, University of Arizona. MIS doctoral program, August 2022 Present.
- Arif Ahmed, University of Arizona. MIS doctoral program August 2021 Present.
- Yang Gu (2022), Natural Language Processing for Complex Tasks: Challenges and Solutions for Small Datasets in the Era of Deep Learning, University of Arizona.
- Manasvi Kumar (2023, with Dr. Joe Valacich). Started doctoral program August 2017-2020.
- Justin Ku (2012), A Crime Analysis Decision Support System for Crime Report Classification and Visualization (*Placement*: Assistant Professor, tenure track, Macon State College).
- Myungjae Kwak (2011), Development and Evaluation of a Predicate-Based Biomedical Search Engine Using Design Science Methodology (*Placement*: Assistant Professor, tenure track, Macon State College).
- Carol Heins-Gonzales (2010), Eliciting User Requirements using Appreciative Inquiry. (*Placement*: Associate Director, I&IT Support, Cal Poly Pomona)
- Alicia Irriberi (2009), Internet Crime Reporting: Design and Evaluation of a Computer Investigative Interview System (*Placement*, visa requirement to return to Mexico, Assistant Professor, tenure track, Instituto Tecnológico Autónomo de México; current: California State University, Fresno)
- Trudi Miller (2008), Dynamic Generation of a Health Topics Overview from Consumer Health Information Documents and its Effect on User Understanding, Memory, and Recall. (*Placement*: Assistant Professor, tenure track, University of Wisconsin Stevens Point)

#### **Doctoral Dissertation – Committee Member**

- Leo Dixon, University of Denver, 2025-Present
- Miranda Lee, Prelim Exam Committee Member, "SKNews: A Design Framework for Skill-oriented Education Program Ranking System", November 2024.

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- Tianyang Xie, Prelim Exam Committee Member, "Accuracy, Fairness, Diversity All at Once: An Influence Function Guided Data Enhancement Approach for Recommender System", March 2024.
- Yue Guo, University of Washington Seattle, 2022-2024.
- Jeffrey Harwell, Claremont Graduate University, 2018-2023.
- Yuanxia Li (2023), University of Arizona, 2020 2023.
- Buomsoo Kim, University of Arizona, 2022.
- Hao Liu, University of Arizona, 2021.
- Xiao Liu (2018), University of Arizona, 2016 2018.
- Jeff Harwell, Claremont Graduate University, Expected Spring 2018 (committee chair for 2 years, until 2013, Claremont Graduate University)
- Kareem Alsudais, Expected Fall 2017 (committee member for 2 years, until 2013, Claremont Graduate University)
- Anthony Corso (chair until 2013, part-time doctoral student, Claremont Graduate University)
- Kun Liu (committee member until 2013, full-time doctoral student, Claremont Graduate University)
- Juliette Gutierrez (committee member until 2013, part-time doctoral student, Claremont Graduate University)
- Abdullah Alghoson (committee member until 2013, full-time doctoral student, Claremont Graduate University)
- Haiqing Li (2010), Designing Effective Persuasive Systems Utilizing the Power of Entanglement: Communication Channel, Strategy & Affect (Chair: Samir Chatterjee, School of Information Systems and Technology, Claremont Graduate University)
- Kristie Kosaka (2008) Trust in Secure Ad hoc On-line Collaboration. (Chair: Samir Chatterjee, School of Information Systems and Technology, Claremont Graduate University)
- Megha Maheshwari (2007), Computer-tailored Motivational Message Generation for Healthy Lifestyle: A New Model based on Behavior Change Theories. (Chair: Samir Chatterjee, School of Information Systems and Technology, Claremont Graduate University)
- Bengisu Tulu (2006), Internet-based telemedicine: an experimental study to provide decision support using real-time assessment of video quality, (Chair: Samir Chatterjee, School of Information Systems and Technology, Claremont Graduate University)
- Ben Schooley (2006), Inter-organizational Systems in Time-Critical Public Services, (Chair: Tom Horan, School of Information Systems and Technology, Claremont Graduate University)
- Kamla Al-Busaidi (2005), A socio-technical investigation of the determinants of knowledge management systems usage, (Chair: Lorne Olfman, School of Information Systems and Technology, Claremont Graduate University)
- Olivia Neece (2 years on committee, Chair: Paul Gray, School of Information Systems and Technology, Claremont Graduate University)
- Bruce Wilcox. A Temporal Data Mining and Unobserved Component Modeling Approach to Credit Risk Correlation Modeling. (Chair: Henry Shellhorn, School of Mathematical Sciences, Claremont Graduate University).

## **Internships and Research Projects**

- Carissa Zhu MD Candidate, Class of 2028, University of Arizona College of Medicine-Phoenix
- Sumi Lee, Department of Linguistics, May 13 August 17, 2024.

#### **Doctoral Dissertation – External Examiner**

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- Somnath Bhattacharya, Indian Institute of Technology Kanpur, Essays On Consumer Focused Information Extraction And Evaluation In Online Environment, 2022-2023.
- Geir Thore Berge, University of Agder, Norway, Methods for Automated Structuring of Health Information for Clinical Decision Support, Spring 2020.
- Pasi Karppinen, University of Oulu, Finland, Studying User Experience of Health Behavior Change Support Systems. (Chair: Prof. Harri Oinas-Kukkonen), 2016.

#### Research/Career Mentor

2023-Present, Faculty Advisor, University of Arizona, Women's Network

2024 Summer-Fall, Faculty Advisor (5 CS Undergraduate Students), Undergraduate Project, Eller Partnership Office (EPO), Partnership with Komatsu

2023, Faculty mentor and steering committee member for training grant #1R25LM014225, Place-based Culturally Responsive Health Informatics Research Education (PHIRE) Program, 2023.

Abby Whitlock, Summer 2023 (Undergraduate Student)

UA BIO5 Institute- KEYS Summer Research Internship (High School Students)

- Akshita Khanna, Maanvik Poddar, Summer 2024 (2 students)
- George Diaz, Riya Nalla, Summer 2023 (2 students)
- Yashas Raman, Sneha Lakamsani, Summer 2022 (2 students)
- Marina Lee Hu, Jyolna Jalpa Behera, Summer 2021 (2 students)
- Jasmine Sleiman, Summer 2020 (1 student)

#### NIH K99R00 - Submission

Echo Warner

## Latin America Summer/Fall Research Program

- Francisco Rafael Arce Garcia, Telematics at Universidad Juárez Autónoma de Tabasco (UJAT), Summer 2016.
- Isaí Angulo Jiménez, Universidad Juárez Autónoma de Tabasco, Summer 2015.
- Jesus Sanchez Guerrero, Universidad Politecnica de Sinaloa, Fall 2014.
- Brianda Armenta Navarrete, Universidad de Sonora, Summer 2014.
- Erick Orlando Rodriguez Mazon, Universidad de Sonora, Summer 2014.

# **Independent Studies**

- Fall 2024 Srikar Madipalli, Personalized Medical Literature Summarization using RAG LLMs.
- Spring 2022: Shivani Dandir, An evaluation of LENA audio for automated and expert driven language analysis.
- Spring 2021: Hyunju (Sara) Song, Entity Extraction
- Spring 2019: Mohammad Moghaddam, Deep Learning
- Spring 2019: Shreya Kumar, Audio Snippets for Text Simplification
- Spring-Fall 2018: Shreya Kumar, Audio Snippets for Text Simplification
- Spring 2018: Menglu Pei, Automated Detection of Connector Words Using Machine Learning

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- Spring 2017: Karan Dhamija, Deep Learning Algorithms for Images.
- Spring 2017: Abhishek Gupta, Deep Learning Algorithms for Text Mining.
- Fall 2016: Shikha Swami, Age Prediction based on Tweets of Users.
- Fall 2016: Namrata Kapoor, Predicting Age based on Semantic Categories in Twitter.
- Fall 2016: Jahnavi Venkataswamy, Using NLP and text mining to assign gender to tweeters based on language model.
- Fall 2015: Joe Sebastian Koolippurackal: Distant Supervision with Twitter Text.
- Fall 2015: Shikha Arun Swami: Latent Dirichelet Allocation (LDA) with Twitter Text.
- Fall 2014, Pooja Kodali: NLP and Health Literacy.
- Fall 2014: Janakiram Pulipati: NLP and Crowdsourced Text.
- Fall 2014: Arun Kumar Jalanila: NLP and Twitter for Asthma.

## **Advisor Undergraduate Honor's Thesis**

- Genesis St. Onge, Enhancing Health Literacy Through AI-Generated Images, May 205
- Skye Pierce Miller, Large Language Models to Improve Health Literacy Through Images, May 2024.
- Mathews Sajan, Rule-based Extraction of Social Determinants of Health from Electronic Health Records of Patients with Type 2 Diabetes, May 2023.
- 2018, Anna Woolridge, "Teaching Underserved Students Programming Skills Using Modern Methods" (Winner of the McCord Student Choice Award), May 2018.

# **Advisor Medical Student Research Projects**

• Ursman Malik, Investigating Coccidioidomycosis (Valley Fever) using ICD Codes, (co-advisor), 2024-2025

## **COMMITTEES**

## **University of Arizona (2013-current)**

- 2025 Present, AI In Research, Co-Lead, University of Arizona
- 2021 *Present*, Associate Deans for Research (ADR) Council, University of Arizona
- 2019 *Present*, MIS Department, Promotion and Tenure Committee, Member (7 cases).
- 2015 Present, University of Arizona, Research Computing Governance Committee, Data Management and Curation Subcommittee
- 2021 2024, Advancing Diversity of Research Committee (ADRC) (ADR), University of Arizona
- 2023 2024, I-School, University of Arizona, Faculty Search Committee
- 2023, Center for Biomedical Informatics and Biostatistics (CB2), Director Search Committee, University of Arizona
- 2022 2023, Management Information Systems, University of Arizona, Faculty Search Committee
- 2022 2023, Computer Science, University of Arizona, Faculty Search Committee
- 2022 2023, Data Science Institute, University of Arizona, Director Search Committee
- 2022, MIS Department, Promotion and Tenure Committee, Chair (1 case).
- 2022 (Member), MIS Faculty Review Committee, MIS Department

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- 2021 (Chair), MIS Faculty Review Committee, MIS Department
- 2019 2020 (Member), MIS Faculty Review Committee, MIS Department
- 2018 2021, Eller College of Management Committee on Diversity and Inclusion
- 2016 2021, Conflict of Interest Overview Committee, MIS Department.
- 2017 (Chair) Department of Management Information Systems, MIS Master's Program Committee
- 2016 2018, (Chair) Eller College of Management Committee on Diversity and Inclusion
- 2017 2018, Department of Management Information Systems, MIS Doctoral Program Committee
- 2014 Present, Eller College of Management, Eller Center for Management Innovations in Healthcare, Faculty Advisory Committee
- 2014 2017, Department of Management Information Systems, MIS MS Program Committee

## **Claremont Graduate University (2003-2013)**

- 2012-2013, University Budget and Finance Planning Committee.
- 2012-2013, University Transdisciplinary Studies Steering Committee.
- 2010-2012, University Grievance Committee.
- Fall 2005 Member of the Advisory Committee to the CGU Applied Women's Studies Program.
- 2008 2011, University Nominations and Elections Committee
- 2007 2010, University Information Technology Steering Committee
- Fall 2005 2006, Advisory Committee for Claremont Colleges Digital Library (CCDL)
- Fall 2004, University IT Steering Committee.
- 2003, Library Liaison for the School of Information Science.

## OTHER PROFESSIONAL SERVICE

#### **Advisory Board Member**

• 2023-Present, UGenome Biotech, <a href="https://ugenomebiotech.com/">https://ugenomebiotech.com/</a>

#### **Promotion and Tenure Reviews**

- August 2024, Review Package for Promotion to Associate Professor for the Department of Information Systems and Cyber Security, University of Texas at San Antonio
- July 2023, Review Package for Promotion to Professor for the Robinson College of Business, Georgia State University
- June 2023, Review Package for Promotion to Professor for the Department of Surgery, School of Medicine, The University of Minnesota.
- February 2023, Review Package for Promotion to Professor for the College of Engineering and Computing, University of South Carolina.
- August 2022, Review Promotion to Associate Professor, for the Department of Information Systems and Business Analytic, Florida International University.

#### **Grant Proposal and Award Reviews**

- 2024 *Present*,, Permanent Study Section Member (by invitation), NIH Study Section Clinical Data Management and Analysis Study Section (3 review cycles per year, 7-10 proposals critiqued per review cycle worth approximately \$10-15M, 40+ proposals scored).
- December 2024, All of Us, Study Section, University of Arizona
- October 2023, Study Section, Individually Measured Phenotypes to Advance Computational Translation in Mental Health (IMPACT-MH), Panel Member.
- June 2023, Study Section, MCST-14: Small Business: Computational, Modeling, and Biodata Management, SBIR, NIH. Panel Member.
- February 2023, Proposal Reviews, Center for Healthcare Management Innovations, University of Arizona
- February 2023, Study Section, NIH Center for Scientific Review (CSR), Panel Member, Clinical Data Management and Analysis (CDMA) Study Section.
- October 2022, NIH Center for Scientific Review (CSR), Panel Member, Clinical Data Management and Analysis (CDMA) Study Section.
- July 2022, Davidson Institute Fellows Scholarship Judge
- February 2022, Study Section, National Institute of Mental Health (NIMH), Panel Member.
- February 2022, Study Section, Agency for Healthcare Research and Quality (AHRQ), Health Information Technology (HITR). Panel Member.
- Jan 2019 September 2021, Study Section, Agency for Healthcare Research and Quality (AHRQ), Health Information Technology (HITR). Appointed permanent member. Reviews in February, May and October annually.
- July 2020, Study Section, National Library of Medicine, National Institutes of Health, NLM BILDS Review Panel.
- July 2019, NIMH, Special Emphasis Panel: Practice-Based Research Network to Transform Mental Health Care peer review meeting.
- February 2019, Expert Review, Research Council, KU Leuven (University of Leuven, Belgium).
- January 2019, Seed Fund Proposals Review Committee, National Center for Women in Information Technology (NCWIT).
- October 2018, Agency for Healthcare Research and Quality (AHRQ), Health Information Technology (HITR) Review Panel.
- June 2018, Mental Health Services Research Committee.
- July 2017, National Library of Medicine, Special Emphasis Panel/Scientific Review Group ZLM1 ZH-C (01).
- December 2016, National Library of Medicine, Special Emphasis Panel/Scientific Review Group ZLM1 ZH-C.
- July 2016, National Library of Medicine, Special Emphasis Panel/Scientific Review Group ZLM1 ZH-C.
- February 2016, Expert Review, Research Council and IOF Council, KU Leuven (University of Leuven, Belgium).
- January 2016, Mentoring Awards Review Panel, National Center for Women in Information Technology (NCWIT).
- Summer 2014, Grace Hopper Celebration of Women in Computing, Scholarship Application Committee.
- November 2012, NIH Review Panel, NIH, Proposals in response to Social Network Analysis and Health (Program Manager: Michael Micklin).
- October 2011, NIH Review Panel, NIH, Proposals in response to PAR 10-145/146, Social Networks and Health (Program Manager: Martha M. Faraday).
- May 2006, Arlington, NSF SEIII Review Panel, Medical Informatics Group, (Program Manager: Jim French).
- July 2005, Arlington, NSF SEIII Review Panel, General Computer Science Group, (Program Manager: Jim French).

- July 2004, Arlington, NSF SEIII Review Panel (Program Manager: Jim French).
- 2004, Reviewer for Multidisciplinary Projects in Life Sciences, proposals submitted to the Institute for Biomedical Sciences and Biotechnology at the University of Arizona.

#### **Other Review Activities**

- AIS SIG Health Best Paper Award Competition Judge. 2024.
- RAND Corporation Research Report, Using Natural Language Processing to Code Patient Experience Narratives, October 2020. (https://www.rand.org/pubs/research\_reports/RRA628-1.html)

#### Reviewer for the following journals:

• Artificial Intelligence in Medicine, Bioinformatics, Computer Methods and Programs in Biomedicine, Health Systems, HealthCare, International Journal of Social and Organizational Dynamics in IT, Information Sciences, Decision Support Systems (DSS), Information Systems Research (ISR), Journal of Biomedical Informatics (JBI), Journal of the American Society of Information Science and Technology (JASIST), Journal of the American Medical Informatics Association (JAMIA). Journal of Medical Internet Research (JMIR), Journal of Database Management, IEEE Systems, Man, & Cybernetics, IEEE Transactions on Knowledge and Data Engineering; Information Processing & Management, Natural Language Engineering, Management Information Systems Quarterly (MISQ), both journal and special issues, Security Informatics, Science Translational Medicine...

## Reviewer for the following conferences:

 AMIA Annual Symposium (annually), AMCIS 2015, 2016, Celebration of Women in Computing in Southern California (CWIC-SoCal) 2014, IEEE International Conference on Healthcare (ICHI) (annually), The European Conference on Information Systems (ECIS), 2013, 2014, 2019, Fall Symposium, Americas Conference on Information Systems (AMCIS), ACM & IEEE Joint Conference on Digital Libraries (JCDL) (annually), International Conference on Information Systems (ICIS) (annually), 2003 IEEE/WIC International Conference on Web Intelligence, 2003, Healthcom, ...

#### **Book Reviews:**

Book Proposal: Medical Informatics: Advances in Knowledge Management and Data Mining in Biomedicine, Eds.
 H. Chen, S. Fuller, and A. McCray., Reviewer for the 2005 IMIA Yearbook of Medical Informatics (Selection of best papers for 2005), Reviewer for the 2004 IMIA Yearbook of Medical Informatics (Selection of best papers for 2004)

#### **Volunteer Activities and Other Qualifications**

- 2024-Present: Volunteer, Pima Animal Care Center (PACC)
- 2017- Present: Volunteer, Humane Society of Southern Arizona (HSSA)
- 2022-2023: Volunteer, Rio Verde Vista, HOA, Vice-President.
- 2023: Fear Free Shelters, Fear Free Shelter Certificate Core
- Professional Memberships: AIS, IEEE (Senior Member), AMIA
- Language Proficiency: (fluent) English, Dutch, (basic) French, and (minimal) German and Spanish

## PROGRAM CREATION

## 2024-Present: Research Director for the Center for Management Innovations in Healthcare (CMIH)

Role/Responsibilities: Reenergize the research activities of the center (not activities related to the online degree) Continued and updated the Small Grants Program (Spring 2024)

Reinstated the annual research seminar with Eller faculty presenting healthcare-related research.

Program Creation (Fall 2024): CMIH Experiential Learning in Healthcare for UA undergraduates: Undergraduate students will work in interdisciplinary teams and on healthcare-related topics. See <a href="https://eller.arizona.edu/departments-research/centers-labs/management-innovations-healthcare/programs/experiential-learning">https://eller.arizona.edu/departments-research/centers-labs/management-innovations-healthcare/programs/experiential-learning</a>

Selected to represent CMIH at Fuel Wonder, at the University of Arizona Philanthropy and Alumni Engagement held in Phoenix.

#### 2022-Present: Associate Dean for Research (ADR) for Eller College of Management

Role/Responsibilities: Represent Eller on campus, share information about grant opportunities with Eller faculty members, and encourage Eller faculty members to submit proposals (meetings, summaries, proposal and team creation facilitation, connections with institutes across campus)

Creation, use, and management of the EllerResearch listsery (2022-Present), 94 subscribers.

Program Creation (2025-Present) - Eller Extramural Research Funding Mentorship

#### 2014-2017- Creator, Tomorrow's Leaders Equipped for Diversity.

https://eller.arizona.edu/why/diversity/tomorrows-leaders

The program is designed to teach awareness and mindfulness of the obstacles but also the advantages of diversity and inclusion in the field of Information/Computer Science, Systems and Technology. The program has been externally funded for 5+ years and comprises the following components and achievements:

Lean-In Circles: Doctoral level & Master's level – Lean In Circle. Serve as mentor, supporter and sponsor. Certificate Program (at the University of Arizona, 2013-present)

- 20+ speakers presented in the speaker series. All are available online: https://eller.arizona.edu/why/diversity/tomorrows-leaders/speaker-presentations
- Video library of all speakers, available on YouTube
- Over 200 certificates awarded (Certificate of Completion) to students who complete 3 or more quizzes for different speaker presentations.

Video Project Program: Four project scholarships awarded for educational diversity videos.

Travel Awards: Annually awarded 5-10 travel awards to students to attend Grace Hopper Celebration of Women in Computing.

Did-You Know Emails: Monthly emails is sent to all staff and faculty members and students, as well as to several local organizations in Tucson with facts about diversity and links to our Facebook page to encourage discussion.

Diversity Diner (Fall 2017): an opportunity to meet someone 'different' who is al local professional for a coffee with pastries and chat.