

- USC Women in Science and Engineering (WiSE) Merit Fellowship (2015)
- IEEE Signal Processing Society Travel Grant for attending ICASSP 2014
- USC Women in Science and Engineering (WiSE) travel grant for attending ICASSP 2014
- USC Annenberg Graduate Fellowship (2010)
- USC Women in Science and Engineering (WiSE) Graduate Top-off Fellowship (2010)
- Academic Honor, Federal Scholarship Institution of Greece (2005-2006, 2007-2008)

EXTERNALLY
FUNDED GRANTS

1. A Speech-Based Artificial Intelligence System for Predicting Team Functioning Degradation in HERA Missions; Theodora Chaspari (PI), Suzanne Bell (Co-I); National Aeronautics and Space Administration (NASA) - Human Exploration Research Opportunities (HERO) Program; \$147,873 (Share: \$114,332); 2024-2025
2. Cognitive Assistant for Training Estimators: Phase II; DoD Acquisition Innovation Research Center; D. Selva (PI), A. Salado (Co-PI), T. Chaspari (Co-PI); \$355,000 (Share: \$100,000); 2022-2023
3. Collaborative Research: FW-HTF-P: Assistive Artificial Intelligence for Diversifying and Reskilling the Disaster Management Workforce of the Future; National Science Foundation; Amir Behzadan (PI), Michelle Meyer (Co-PI), Theodora Chaspari (Co-PI); \$100,000 (Share: \$6,458); 2022-2023
4. CAREER: Enabling Trustworthy Speech Technologies for Mental Health Care: From Speech Anonymization to Fair Human-centered Machine Intelligence; National Science Foundation; Theodora Chaspari (PI); IIS-2046118, \$600,000; 2021-2026
5. Investigating Human Trust in AI: A Case Study of Human-AI Collaboration on a Speech-Based Data Analytics Task; Air Force Office of Scientific Research (AFOSR); T. Chaspari (PI), J. Hirschberg (Senior Personnel), S. Ita Levitan (Senior Personnel); \$100,000; 2021-2023 (# FA9550-22-1-0010)
6. Artificial intelligence for tracking micro-behaviors in longitudinal data and predicting their effect on well-being and team performance; Theodora Chaspari (PI), Suzanne Bell (Co-I); National Aeronautics and Space Administration (NASA) - Human Exploration Research Opportunities (HERO) Program; \$150,000 (Share: \$124,000); 2022-2023 (#80NSSC22K0775)
7. SCC-IRG Track 2: Digital Twin City for Age-friendly Communities - Crowd-biosensing of Environmental Distress for Older Adults; National Science Foundation; T. Chaspari (PI), Y. Ham (Co-PI), C. Lee (Co-PI), J. Ostlind (Co-PI); \$1,500,000 (Share: \$400,000); 2021-2025
8. A risky day: Identifying socio-emotional states that precipitate risky behaviors in adolescents' real lives; United States - Israel Binational Science Foundation; R. Arbel (Israel PI), T. Chaspari (U.S. PI); \$208,150 (Share: \$44,275); 2021-2023
9. Cognitive Assistants for Training Cost Estimators: Proof of Concept; DoD Acquisition Innovation Research Center; D. Selva (PI), A. Salado (Co-PI), T. Chaspari (Co-PI); \$100,000 (Share: \$33,333); 2021-2022
10. Identifying the causes of "Ghost Alarms" occurring in General Motors Paint Shops; General Motors; Theodora Chaspari (PI), Debdeep Pati (Co-PI); \$395,928 (Share: \$193,950); 2021-2022
11. CHS: Medium: Collaborative Research: Bio-behavioral data analytics to enable personalized training of veterans for the future workforce; National Science Foundation; Theodora Chaspari (Lead PI), Amir H. Behzadan (Co-PI), Winfred Arthur Jr. (Co-PI); \$500,000; (Share: \$303,664); 2020-2023
12. The Development and Systematic Evaluation of an AI-Assisted Just-in-Time Adaptive Intervention for Improving Child Mental Health; National Institutes of Health; Colliga Apps Corp, Adela Timmons (PI), Theodora Chaspari (Co-I); \$416,800 (Share: \$134,762); 2020-2022

13. Population-specific and context-aware machine learning for novel bio-behavioral markers of warfighter performance; Air Force Research Lab; Theodora Chaspari (PI), Winfred Arthur Jr. (PI); \$34,000; 2020-2021
14. TILES - Tracking Individual Performance with Sensors; Intelligence Advanced Research Projects Activity (IARPA); Shrikanth Narayanan (PI), Theodora Chaspari (PI, Texas A&M subcontract); \$3,567,253 (Share: \$50,000); 2019-2020
15. Doctoral Consortium at the 2019 International Conference On Affective Computing and Intelligent Interaction; National Science Foundation; Theodora Chaspari (PI); \$8,000; 2019-2021
16. ENDEAVR: Reinventing Learning for Smart Cities; Keck Foundation; Wei Li (PI), Anatol Bologan (Co-PI), Alireza Talebpour (Co-PI), Chanam Li (Co-PI), Theodora Chaspari (Co-PI); \$150,000 (Share: \$10,000); 2018-2021
17. Low-Cost In-The-Moment Bio-Signal Interventions to Promote Students' Public Speaking Skills in a Virtual Learning Environment; Engineering Information Foundation; Theodora Chaspari (PI), Amir Behzadan (co-PI); \$25,000 (Share: \$12,499); 2018-2019
18. TILES - Tracking Individual Performance with Sensors; Intelligence Advanced Research Projects Activity - MOSAIC; Shrikanth Narayanan (PI), Theodora Chaspari (PI, Texas A&M subcontract); \$2,557,902 (Share: \$46,433); 2018-2019

INTERNAL GRANTS

1. Data Science for Social Justice; Lu Tang (PI), Theodora Chaspari (Co-PI & Associate Director), Ruihong Huang (Co-PI); Texas A&M Data Science Institute (TAMIDS) - Thematic Labs Program; \$200,000; 2021-2023
2. Design and delivery of personalized, AI-assisted, accessible, positive-affect treatments for depression and anxiety; TAMU X-Grant Program; A. MacNamara (PI), R. Gutierrez-Osuna (Co-PI), M. Meagher (Co-PI), T. Chaspari (Co-PI), S. Scherr (Co-PI), I. Liberzon (Co-PI); \$1,283,542; 2021-2023
3. Preventing Opioid Relapse: Integrating Behavioral and Medication Treatment for Opioid Use Disorder in Jails; TAMU Presidential Clinical Research Partnership (PCRPP) Grants; M. Meagher (PI), S. Fields (Co-PI), J. Alonzo (Co-PI), C. McCord (Co-PI), L. Osborne (Co-PI), R. Heffer (Co-PI), R. Hutchison (Co-PI), T. Chaspari (Co-PI), A. MacNamara (Co-PI); \$199,980 (Share: \$46,402), 2021-2023
4. Tracking Microaggressions In Science, Technology, Engineering, And Mathematics; Texas A&M Triads for Transformation (T3); Theodora Chaspari (PI), Ruihong Huang (Co-PI), Srividya Ramasubramanian (Co-PI); \$30,000; 2021-2022
5. CoFABS-Q: A dataset of face, body, and speech cues in web-mined COVID-19 conversational vlogs; Texas A&M Data Science Institute (TAMIDS); Amir H. Behzadan (PI), Theodora Chaspari (Co-PI), Preeti Zanwar (Co-PI); \$30,000; 2020-2021
6. Intelligent psychoacoustic spaces for health and well-being; Theodora Chaspari (PI), Anastasia Muliana (Co-PI), James Hubbard, Jr. (Co-PI), Youngjib Ham (Co-PI), Winfred Arthur (Co-PI); Texas A&M Innovation [X] Program, \$20,000; 2020-2021
7. Digital Twin City for Age-friendly Communities: Crowd-biosensing of Environmental Distress for Older Adults; Texas A&M X-Grant; Changbum R. Ahn (PI), Theodora Chaspari (co-PI), Chanam Lee (co-PI), Youngjib Ham (co-PI); \$325,000 (Share: \$44,425); 2019-2021
8. Adaptive Responsive Environments for Physical and Mental Health; Texas A&M Innovation [X] Program; Theodora Chaspari (PI), Anastasia Muliana (Co-PI), James Hubbard, Jr. (Co-PI), Youngjib Ham (Co-PI), Winfred Arthur (Co-PI); \$20,000; 2019-2020
9. Preserving speaker identity in cyber-interactions; Texas A&M PESCA Research Seed Grant Program; Theodora Chaspari (PI); \$10,000; 2019-2020

10. Crowd-Biosensing Of Location-Based Physical And Emotional Distress For Walkable Built Environment; Texas A&M Triads for Transformation (T3); Changbum R. Ahn (PI), Theodora Chaspari (co-PI), Jane Winslow (co-PI); \$35,777; 2019-2020

TEACHING
EXPERIENCE

- CSCI-6402/EDUC-6504/LING-6200/PHIL-6310/PSYC-6200: Methods in Cognitive Science, University of Colorado Boulder, Spring 2025
- CSCI 5622: Machine Learning, University of Colorado Boulder, Fall 2024 (4.72/5)
- CSCI 5622: Machine Learning, University of Colorado Boulder, Spring 2024 (4.71/5)
- CSCI 6402/LING-6200/PHIL-6310/PSYC-6200: Issues and Methods in Cognitive Science, University of Colorado Boulder, Fall 2023 (4.25/5)
- CSCE 633: Machine Learning (distance learning), Texas A&M University, Spring 2023
- Algorithmic Fairness, Course Module (distance learning), Texas A&M University
- CSCE 421: Machine Learning, Texas A&M University, Fall 2022 (4.68/5)
- CSCE 633: Machine Learning, Texas A&M University, Fall 2021 (4.64/5)
- CSCE 489: Artificial Intelligence for Social Good, Texas A&M University, Spring 2021 (4.50/5)
- CSCE 633: Machine Learning, Texas A&M University, Fall 2020 (4.70/5)
- CSCE 421/633: Machine Learning, Texas A&M University, Spring 2020 (CSCE 633: 4.81/5; CSCE 421: 4.56/5)
- CSCE 421: Machine Learning, Texas A&M University, Fall 2019 (4.78/5)
- CSCE 633: Machine Learning, Texas A&M University, Spring 2019 (4.59/5)
- CSCE 689: Human Behavioral Analytics, Texas A&M University, Fall 2018 (4.71/5)
- CSCE 689: Human Behavioral Analytics, Texas A&M University, Spring 2018 (4.64/5)
- CSCE 633: Machine Learning, Texas A&M University, Fall 2017 (4.62/5)

PATENTS

- P1. A.C. Timmons, T. Chaspari, G. Margolin, and S.S. Narayanan, “A Technology-Facilitated Support System for Monitoring and Understanding Interpersonal Relationships,” Provisional Patent 62/561,938, U.S. Patent Application No. 16/291,225.
- P2. A.C. Timmons, T. Chaspari, M.W. Ahle, G. Margolin, and S.S. Narayanan, “An Expert-Driven, Technology-Facilitated Intervention System for Improving Interpersonal Relationships,” Provisional Patent 62/563,192, U.S. Patent Application No. 16/291,399.

BOOK CHAPTERS

- B1. S. Begerowski, P. Paromita*, A. Khader, S. T. Bell, and T. Chaspari, “Speech descriptors of micro-behaviors during team interactions,” Computational Group and Team Dynamics: Forging an Interdisciplinary Science, Eds: Steve W. J. Kozlowski, Hayley Hung, Nale Lehmann-Willenbrock, & Albert Ali Salah. Oxford University Press (OUP), 2024. **(invited)**
- B2. T. Chaspari, “Sensor Integration for Behavior Modeling,” Elsevier Encyclopedia of Sensors and Biosensors, 2022. **(invited)**
- B3. K. Feng* and T. Chaspari, “Transfer learning and generalizability in automatic emotion recognition,” Frontiers in Computer Science, 2:9, DOI: 10.3389/fcomp.2020.00009. **(invited)**
- B4. T. Chaspari, A.C. Timmons, G. Margolin, “Population-specific and personalized (PSP) models of human behavior for leveraging smart and connected data,” Smart Data: State-of-the-Art and Perspectives in Computing and Applications, CRC Press, Taylor & Francis Group, USA, 2019.
- B5. D. Bone, T. Chaspari, and S.S. Narayanan, “Behavioral signal processing and Autism. Learning from multimodal behavioral signals,” Autism Imaging and Devices, 2017.

* advised students

JOURNAL
PUBLICATIONS

- J1. D. Nartey, T. Chaspari, R. Mehta, “Exploring the Role of Cardiac Activity in Forecasting Cognitive Fatigue with Machine Learning,” IISE Transactions on Healthcare Systems Engineering, DOI: 10.1080/24725579.2024.2449422, 2025

- J2. E.H. Nirjhar* and T. Chaspari, “*Modeling Gold Standard Moment-to-Moment Ratings of Perception of Stress from Audio Recordings*,” IEEE Transactions on Affective Computing, DOI: 10.1109/TAFFC.2024.3435502.
- J3. M. Yang, A. El-Attar, and T. Chaspari, “*Deconstructing demographic bias in speech-based machine learning models for digital health*,” Frontiers in Digital Health, vol. 6, DOI: 10.3389/fdgth.2024.1351637.
- J4. M. N. Sakib**, E. Hagen, N. Mazza, N. Rani, E. H. Nirjhar*, S. L. Chu, T. Chaspari, A. Behzadan, & W. Arthur, Jr., “*Capitalizing on strengths and minimizing weaknesses of veterans in civilian employment interviews: Perceptions of interviewers and veteran interviewees*,” APA Military Psychology, 2024, 1–13 DOI: 10.1080/08995605.2024.2356498
- J5. A.A. Tutul*, E.H. Nirjhar*, and T. Chaspari, “*Investigating dimensions of trust in human-AI collaboration for a speech-based data analytics task*,” Taylor & Francis International Journal of Human-Computer Interaction, pp. 1-19, 2024, DOI: 10.1080/10447318.2024.2328910
- J6. Y. Ryjova, A. I. Gold, A. C. Timmons, S. C. Han, T. Chaspari, C. Pettit, Y. Kim, A. Beale, K. F. M. Kazmierski, and G. Margolin, “*A day in the life: Couples’ everyday communication and subsequent relationship outcomes*,” APA Journal of Family Psychology, 2024, DOI: 10.1037/fam0001180
- J7. P. Paromita*, K. Mundnich, A. Nadarajan, B. Booth, S. Narayanan, and T. Chaspari, “*Modeling inter-individual differences in ambulatory-based multimodal signals via metric learning: A case study of personalized well-being estimation of healthcare workers*,” Frontiers in Digital Health, 5, 1195795, 2023, DOI: 10.3389/fdgth.2023.1195795
- J8. W. Li, J. Bian, C. Lee, A. Bologan, T. Chaspari, T. Calvesbert, J. Masterson, J. Stillisano, K. Wright, S. Shields, D. Fowler, “*Interdisciplinary, Project-Based, Service-Learning for Smart and Connected Communities: Insights from ENDEAVR*,” International Journal of Technology and Design Education, 12(2), 304–334, 2023.
- J9. C.C. Li, T. Chaspari, E.M. Provost, D. Bone, S.S. Narayanan, “*An engineering view on emotions and speech: From analysis and predictive models to responsible human-centered applications*,” Proceedings of the IEEE, pp. 1-17, DOI: 10.1109/JPROC.2023.3276209, 2023.
- J10. E.H. Nirjhar*, J. Kim**, J.F. Winslow, T. Chaspari, and C.R. Ahn, “*Detecting Neighborhood Physical Disorders From Wearable Devices to Promote Walkability*,” Elsevier Smart Health, 29, DOI: 10.1016/j.smhl.2023.100414, 2023.
- J11. J. Kim**, E.H. Nirjhar*, T. Chaspari, C. Lee, Y. Ham, J.F. Winslow, and R. C. Ahn, “*Location-based collective distress using large-scale biosignals in real life for walkable built environments*,” Scientific Reports, 13, 5940, DOI: 10.1038/s41598-023-33132-z, 2023.
- J12. D. Liu, Z. Sahid, Y.H. Tung, A. Muliana, N. Kalantar, T. Chaspari, J. E. Hubbard, and E. Green, “*Tunable Acoustic Properties in Reconfigurable Kerf Structures*,” ASCE Journal of Architectural Engineering, 29(3), pp. 04023018, DOI: 10.1061/JAEIED.AEENG-1539, 2023.
- J13. P. Paromita*, A. Khader, S. Begerowksi, S.T. Bell, and T. Chaspari, “*Vocal markers of micro-behaviors between astronaut team members during analog space exploration missions*,” IEEE Pervasive Computing, pp. 1-12, DOI: 10.1109/MPRV.2022.3232780, 2023.
- J14. A.C. Timmons, S.C. Han, T. Chaspari, Y. Kim, S. Narayanan, and G. Margolin, “*Relationship Satisfaction, Fluctuating Feelings of Closeness and Annoyance, and Linkage in Electrodermal Activity in Dating Couples’ Daily Lives*,” APA Emotion, DOI: 10.1037/emo0001201, 2023.
- J15. A.C. Timmons, J.B. Duong, N. Simo Fiallo, T. Lee, H.P. Quynh Vo, M.W. Ahle, J.S. Comer, L.C. Brewer, S. Frazier, and T. Chaspari, “*A Call to Action on Assessing and Mitigating Bias in Artificial Intelligence Applications for Mental Health*,” SAGE Perspectives on Psychological Science, DOI: 10.1177/17456916221134490, 2022. (**impact factor 11.6**)
- J16. B. Lee, C.R. Ahn, P. Mohan*, and T. Chaspari, “*Assessing Daily Activity Routines from High-dimensional Sensing Data Using an Unsupervised Approach*,” Journal of Computing in Civil Engineering, 37(1), DOI: 10.1061/JCCEE5.CPENG-4895, 2023.
- J17. G. Margolin, M.E. Daspe, A.C. Timmons, G.W. Corner, C. Pettit, H.F. Rasmussen, T. Chaspari, S.C. Han, R. Arbel, L.S. Shapiro, K.F.M. Kazmierski, L. Del Piero, and H.L. Schacter, “*What Happens When Young Couples Discuss Personal Loss? Relational, Emotional, and Physiological Impacts*,” APA Journal of Family Psychology, DOI: 10.1037/fam0000979, 2022.

- J18. J. Kim**, E.H. Nirjhar*, K. Kim, T. Chaspari, Y. Ham, J.F. Winslow, C. Lee, and C.R. Ahn, “*Capturing environmental distress of pedestrians using multimodal data: The interplay of biosignals and image-based data,*” *Journal of Computing in Civil Engineering*, 36(2), 04021039, 2022.
- J19. A. Das, B. Mortazavi, S. Sajjadi, T. Chaspari, L. E. Ruebush, N.E. Deutz, G.L. Cote, R. Gutierrez-Osuna, “*Predicting the macronutrient composition of mixed meals from dietary biomarkers in blood,*” *IEEE Journal of Biomedical Health Informatics*, DOI: 10.1109/JBHI.2021.3134193, 2021.
- J20. K. Feng* and T. Chaspari, “*Few-shot Learning in Emotion Recognition of Spontaneous Speech Using a Siamese Neural Network with Adaptive Sample Pair Formation,*” *IEEE Transactions on Affective Computing*, DOI: 10.1109/TAFFC.2021.3109485, 2021. (**impact factor 10.5**)
- J21. S.C. Han, H. Schacter, A.C. Timmons, Y. Kim, S. Sichko, C. Pettit, T. Chaspari, S. Narayanan, and G. Margolin, “*Romantic partner presence and physiological responses in daily life: Attachment style as a moderator,*” *Elsevier Biological Psychology*, vol. 161, DOI: 10.1016/j.biopsycho.2021.108082, 2021.
- J22. M. N. Sakib**, T. Chaspari, A. Behzadan, “*A feedforward neural network for drone accident prediction from physiological signals,*” *Emerald Publishing Smart and Sustainable Built Environment*, DOI: 10.1108/SASBE-12-2020-0181, 2021.
- J23. B. Nam, P. Paromita*, S. L. Chu, T. Chaspari, and S. Woltering, “*Moments of insight in problem solving relate to bodily arousal,*” *The Journal of Creative Behavior*, DOI: 10.1002/jocb.504, 2021.
- J24. P. Zanwar, J. Kim**, M. Manser, Y. Ham, T. Chaspari, and R.C. Ahn, “*Use of Connected Technologies to Mitigate Barriers and Stressors for Older Adults,*” *Frontiers in Public Health*, 9:80, DOI: 10.3389/fpubh.2021.578832, 2021.
- J25. M. Yadav*, M.N. Sakib*, E. H. Nirjhar, K. Feng, A. Behzadan, and T. Chaspari, “*Exploring individual differences of public speaking anxiety in real-life and virtual presentations,*” *IEEE Transactions on Affective Computing*, DOI: 10.1109/TAFFC.2020.3048299, 2020. (**impact factor 10.5**)
- J26. P. Mohan*, B. Lee, T. Chaspari, and C.R. Ahn, “*Assessment of daily routine uniformity in a smart home environment using hierarchical clustering,*” *IEEE Journal of Biomedical Health Informatics*, DOI: 10.1109/JBHI.2020.3048327, 2020. (**impact factor 5.2**)
- J27. V. Ravuri*, P. Paromita*, K. Mundnich, A. Nadarajan, B. Booth, S. Narayanan, and T. Chaspari, “*Investigating group-specific models of well-being for hospital workers: Implications on demographic and job-related bias,*” *World Scientific Publishing Company, International Journal of Semantic Computing*, Vol. 14, No. 04, pp. 477-499, 2020. (**invited paper**)
- J28. B. Lee, C.R. Ahn, P. Mohan*, T. Chaspari, and H.S. Lee, “*Evaluating the Routine Variability of Daily Activities in Smart Homes with Image Complexity Measures,*” *ASCE Journal of Computing in Civil Engineering*, 34(6), 04020042, 2020. (impact factor 3.4)
- J29. M. N. Sakib**, T. Chaspari, A. Behzadan, “*Physiological Data Models to Understand the Effectiveness of Drone Operation Training in Immersive Virtual Reality,*” *ASCE Journal of Computing in Civil Engineering*, 35(1), 04020053, 2020. (impact factor 3.4)
- J30. J. Kim**, M. Yadav*, T. Chaspari, and C.R. Ahn, “*Environmental Distress and Physiological Signals: An Examination of the Saliency Detection Method,*” *ASCE Journal of Computing in Civil Engineering*, 34(6), 04020046, 2020. (impact factor 3.4)
- J31. K. Gupta*, A. Gujral*, T. Chaspari, A. C. Timmons, S.C. Han, Y. Kim, S. Barrett, S. Sichko, and G. Margolin, “*Sub-population specific models of couples’ conflict,*” DOI: 10.1145/3372045, *ACM Transactions on Internet Technology*, 20(2), 2020.
- J32. H. Schacter, C. Pettit, Y. Kim, S. Sichko, A.C. Timmons, T. Chaspari, S.C. Han, and G. Margolin, “*A Matter of the Heart: Daytime Relationship Functioning and Overnight Heart Rate in Young Dating Couples,*” *Annals of Behavioral Medicine*, DOI: 10.1093/abm/kaaa019, 2020. (impact factor 4.4)
- J33. J. Kim**, M. Yadav*, T. Chaspari, and C.R. Ahn, “*Saliency Detection Analysis of Physiological Responses of Pedestrians to Diagnose Built Environment Features in Neighborhood,*” *Elsevier Journal of Advanced Engineering Informatics*, 43: 101035, DOI: 10.1016/j.aei.2020.101035,

2020. (impact factor 3.9)
- J34. N. Nath, T. Chaspari, and A.H. Behzadan, “*Single and Multi-Label Classification of Construction Objects Using Deep Transfer Learning Methods*,” *Journal of Information Technology in Construction (ITcon)*, International Council for Research and Innovation in Building and Construction (CIB) (Special Issue on Virtual, Augmented and Mixed: New Realities in Construction), 24:511-526, 2019. **(invited paper)**
- J35. A. C. Timmons, S.C. Han, T. Chaspari, Y. Kim, C. Pettit, S. Narayanan, and G. Margolin, “*Physiological stress reactivity in daily life as a mediator of the intergenerational transmission of aggression*,” *Physiology & Behavior*, 206, 85-92, DOI: 10.1016/j.physbeh.2019.03.020, 2019.
- J36. N. D. Nath, T. Chaspari, and A. H. Behzadan, “*Automatic classification of overexertion and ergonomic risk levels using body-mounted sensors and machine learning*,” *Elsevier Journal of Advanced Engineering Informatics*, 38:514-526, 2018. (impact factor 3.9)
- J37. G.W. Corner, D.E. Saxbe, T. Chaspari, H.F. Rasmussen, L. Perrone, C. Pettit, M. Friendly, A.C. Timmons, and G. Margolin, “*Compassion in a Heartbeat: Physiology During Couples’ Loss Discussions*,” *Journal of Social and Personal Relationships*, DOI:0265407518770267, 2018.
- J38. D. Bone, C.C. Lee, T. Chaspari, J. Gibson, and S.S. Narayanan, “*Signal Processing and Machine Learning for Behavioral and Mental Health Research and Clinical Applications*,” *IEEE Signal Processing Magazine*, 34(5):196-195, 2017. **(impact factor 11.35)**
- J39. A.C. Timmons, T. Chaspari, S.C. Han, L. Perrone, S.S. Narayanan, and G. Margolin, “*Multimodal detection of conflict in couples using wearable technology*,” *IEEE Computer*, 50(3): 50-59, 2017.
- J40. A.C. Timmons, S.C. Han, L. Perrone, T. Chaspari, B.R. Baucom, S.S. Narayanan, and G. Margolin, “*New frontiers in ambulatory assessment: Big data methods for capturing couples’ emotions, vocalizations, and physiology in daily life*,” *Social Psychological and Personality Science*, 2017.
- J41. T. Chaspari, A. Tsiartas, P. Tsilifis, and S.S. Narayanan, “*Markov Chain Monte Carlo Inference of Parametric Dictionaries for Sparse Bayesian Approximations*,” *IEEE Transactions on Signal Processing*, 64(12): 3077-3092, 2016.
- J42. T. Chaspari, A. Tsiartas, L.I. Stein, S.A. Cermak, and S.S. Narayanan, “*Sparse Representation of Electrodermal Activity with Knowledge-Driven Dictionaries*,” *IEEE Transactions on Biomedical Engineering*, 62(3): 960-971, 2015.
- J43. T. Chaspari, C. Soldatos, and P. Maragos, “*The development of the Athens Emotional States Inventory (AESI): collection, validation and automatic processing of emotionally loaded sentences*,” *World Journal of Biological Psychiatry*, 23: 1-11, 2015.

* advised students ** co-advised students

CONFERENCE PUBLICATIONS

- C1. Feng, K and T. Chaspari, “*A Pilot Study on Clinician-AI Collaboration in Diagnosing Depression from Speech*,” *IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI’24)*, Houston, TX. **(24% acceptance)**
- C2. Feng, K and T. Chaspari, “*Robust and Explainable Depression Identification from Speech Using Vowel-Based Ensemble Learning Approaches*,” *IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI’24)*, Houston, TX. **(24% acceptance)**
- C3. E. H. Nirjhar, W. Arthur, and T. Chaspari, “*Perception of Stress: A Comparative Multimodal Analysis of Time-Continuous Stress Ratings from Self and Observers*,” *ACM International Conference on Multimodal Interaction (ICMI)*, pp. 397-406, DOI: 10.1145/3678957.368574, 2024 **(37% acceptance)**
- C4. R. Yupanqui, J. Sohn, Y. Kim, R. Flores, H. Lee, Y. Ham, C. Lee, and T. Chaspari, “*A multimodal analysis of environmental stress experienced by older adults during outdoor walking trips: Implications for designing new intelligent technologies to enhance walkability in low-income Latino communities*,” *ACM International Conference on Multimodal Interaction (ICMI)*, pp. 302-311, DOI: 10.1145/3678957.3685703, 2024 **(37% acceptance)**
- C5. P. Paromita and T. Chaspari, “*A linguistic analysis of the impact of team interactions on team performance during space exploration missions*,” *IEEE International Conference on Affective*

- Computing and Intelligent Interaction (ACII), 2024 (30% acceptance)
- C6. M. N. Sakib, T. Chaspari, W. Arthur Jr., and A. H. Behzadan, “A Survey of Barriers and Enablers of the Successful Transition of Military Veterans into the Construction Industry,” 8th International Project and Construction Management Conference (IPCMC2024), İstanbul, Turkey, 2024
- C7. D. Nartey, R. Karthikeyan, T. Chaspari, and R. Mehta, “Exploring Cognitive Fatigue: Machine Learning, Forecasting, Generalization, Personalization, Inference and Labels,” Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 67(1): 978-979, DOI: 10.1177/2169506723119227, 2023
- C8. A.A. Tutul*, T. Chaspari, S.I. Levitan, and J. Hirschberg, “Human-AI collaboration for the detection of deceptive speech: Investigating measures and factors of human trust,” IEEE International Conference on Affective Computing & Intelligent Interaction (ACII) Late Breaking Results, Cambridge, MA, 2023, DOI: 10.1109/ACIIW59127.2023.10388114
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* advised students ** co-advised students

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ABSTRACTS

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13. Paromita, P.*, Khander, A., Begerowski, S.R., Bell, S.T, and *T. Chaspari*, “Linguistic and Vocal Markers of Micro-behaviors between Team Members During Analog Space Exploration Missions,” NASA Human Research Program Investigators’ Workshop (IWS), Galveston, TX, 2023.
14. Mazza, N., Schulte, B., Feng, K.*, *Chaspari, T.*, and Arthur, Jr., W., “Examining the Validity of Physiological Measures of Anxiety,” Society for Industrial Organizational Psychology (SIOP), Boston, MA, 2023.
15. Begerowski, S. R., Khader, A. M., Paromita, P.*, *Chaspari, T.*, and Bell, S. T., “What’s that supposed to mean? Capturing Micro-Behaviors in Teams,” Society for Industrial Organizational Psychology (SIOP), Boston, MA, 2023.
16. Avramidis, K., Duong, J.B. Carta, K., Walters, S., Benamu, D., Jumonville, G., Freitag, G., Tutul, A.A., Cabrera, A., Comer, J.S., *Chaspari, T.*, Narayanan, S., and Timmons, A.C., “Psychophysiology Sensing via Wearables to model Family Well-being,” Symposium on Advancing Affective Science with Wearables, Society for Affective Science (SAS) Annual Conference, Long Beach, CA, 2023.
17. Feng, K.*, Duong, J. B., Carta, K. E., Walters, S., Benamu, D., Margolin, G., Timmons, and *Chaspari, T.*, “Personalized machine learning methods for ambulatory stress detection of couples using wearable devices,” Society for Affective Science (SAS) Annual Conference, Long Beach, CA, 2023.
18. Walters, S. N., Carta, K. E., Duong, J. B., Benamu, D. N., Jumonville, G. A., Freitag, G. F., Avramidis, K., Tutul, Abdullah A., Narayanan, S., Chaspari, T., Comer, J. S., Ahle, M. W., Timmons, A. C., “The use of ecological momentary assessment and at-home audio data to develop family conflict profiles,” American Psychological Society (APS) Annual Convention, Washington, D.C., 2023.
19. Hagen, E., Sakib, M.N.*, Rani, N., Nirjhar, E.H.*, Nenkova, A.N., Chaspari, T. Chu, S.L., Behzadan, A., and Arthur, Jr., W., “Interviewer Perceptions of Veterans in Civilian Employment Interviews and Suggested Interventions,” International Military Testing Association, 2022.
20. Li, W., Lee, C., Bian, J., *Chaspari, T.*, Masterson, J., Bologan, A., and Calvesbert, T., “Interdisciplinary Service-Learning Projects that Turn Small, Underserved Communities into Smart Cities,” Association of Collegiate Schools of Planning (ACSP) Annual Conference, 2021.
21. Woltering, S., Nam, B., Paromita, P., *Chaspari, T.*, and Chu, S.L, “The AHA in the body,” 29th Annual Meeting of the Southwest Cognition and Cognitive Neuroscience Society (ARMADILLO), 2021.
22. Kim, J., Ahn, C.R., and *Chaspari, T.*, “Multi-modal bio-sensing of physical and psychological distress of pedestrians: An interdisciplinary approach,” Associated Schools of Construction 57th Annual International Conference, Chico, CA, 2021. **(Best Poster Award)**
23. Schacter, H., Pettit, C., Kim, Y., Sichko, S., Timmons, A., *Chaspari, T.*, Han, S, and Margolin, G., “Teens in Vivo: Leveraging Novel Experience Sampling Methods to Study Adolescent Development in Everyday Life,” 2020 Society for Research in Adolescence (SRA) Biennial Meeting, San Diego, CA, 2020.
24. B. Lee, C.R. Ahn, P. Mohan**, *T. Chaspari*, and H.S. Lee, “Capturing Regularity of ADL Routines Using Hierarchical Clustering Models,” ACM International Conference on Systems for Energy-Efficient Built Environments, Cities, and Transportation (BuildSys), New York, NY, 2019. **(Best Poster Runner-Up Award)**
25. P. Mohan**, B. Lee, *T. Chaspari*, and C.R. Ahn, “Capturing Regularity of ADL Routines Using Hierarchical Clustering Models,” ACM International Conference on Systems for Energy-Efficient Built Environments, Cities, and Transportation (BuildSys), New York, NY, 2019.
26. G. Hadjiantonis* and *T. Chaspari*, “Quantifying cognitive ability, general well being and work

- performance in everyday life using wearable devices,”* Texas A&M LAUNCH Undergraduate Research Poster Presentation, Texas A&M University, College Station, TX, 2019.
27. A.C. Timmons, S.C. Han, Y. Kim, O. Shin, L. Perrone, T. Chaspari, S.S. Narayanan, and G. Margolin, “*Family-of-Origin Aggression, Physiological Stress Reactivity in Daily Life, and the Perpetration of Aggression in Young Adulthood,*” Society for Research and Child Development (SRCD) Biennial Meeting, Austin, TX, 2017.
 28. R. Arbel, M.E. Daspe, T. Chaspari, L. Perrone, C. Pettit, M. Friendly, M. Estafanous, and G. Margolin, “*Let’s talk about loss: Adverse Childhood Experiences and Electrodermal Activity During Dating Couples’ Loss Discussions,*” Society for Research and Child Development (SRCD) Biennial Meeting, Austin, TX, 2017.
 29. S.C. Han, A.C. Timmons, Y. Kim, H. Rasmussen, T. Chaspari, P. Bisla, M. Estafanous, P. Rajeev, K. Salehani, O. Shin, L. Perrone, and G. Margolin, “*Parent-to-child aggression and anger words in daily life among young adults,*” Society for Research and Child Development (SRCD) Biennial Meeting, Austin, TX, 2017.
 30. K. Leo, A.O. Crenshaw, J. Hogan, S. Bourne, T. Chaspari, K.J.W. Baucom, and B.R. Baucom, “*Demand/withdraw behavior, emotional expression, and physiological reactivity during marital conflict,*” Association for Behavioral and Cognitive Therapies (ABCT) Annual Convention, Chicago, IL, 2015.
 31. A.C. Timmons, T. Chaspari, L. Perrone, T. Feng, S.S. Narayanan, and G. Margolin, “*Dating Aggression and Physiological Connectedness in Everyday Life,*” Biennial Conference of the Society for Ambulatory Assessment, State College, PA, 2015.
 32. A.C. Timmons, T. Feng, T. Chaspari, S.S. Narayanan, and G. Margolin, “*An Evaluation of Novel Methodologies for Capturing Couple Dynamics in the Home Environment,*” International Convention of Psychological Science (ICPS), Amsterdam, The Netherlands, 2015.
 33. A.C. Timmons, T. Chaspari, S.S. Narayanan, and G. Margolin, “*The Association between Family Aggression History and Physiological Coregulation in Dating Relationships,*” Society for Research and Child Development (SRCD) Biennial Meeting, Philadelphia, PA, 2015.
 34. L. Stein, T. Chaspari, S.A. Cermak, S.S. Narayanan, A. Schell, and M.E. Dawson, “*Using a Wireless Measure of Electrodermal Activity: Comparisons to Traditional Wired Equipment,*” International Meeting for Autism Research (IMFAR), Salt Lake City, UT, 2015.
 35. L. Stein, T. Chaspari, S.A. Cermak, S.S. Narayanan, A. Schell, and M.E. Dawson, “*Preliminary validation of the Q-Sensor: An innovative measure of real world electrodermal activity,*” Society of Pediatric Psychology Annual Conference (SPPAC), San Diego, CA, 2015.
 36. T. Chaspari, C.C. Lee, M.P. Black, and S.S. Narayanan, “*Analyzing the Physiological Synchrony of Children with Autism and their Parents with Signal Processing Techniques,*” International Meeting for Autism Research (IMFAR), Toronto, Canada, 2012.
 37. M. P. Black, D. Bone, T. Chaspari, A. Tsiartas, P. Gorrindo, M. E. Williams, P. Levitt, and S.S. Narayanan, “*Signal Processing Tools for the Automatic Analysis of Child-Psychologist Interactions,*” International Meeting for Autism Research (IMFAR), San Diego, CA, 2011.

* advised students ** co-advised students

INVITED TALKS AND LECTURES

1. “Toward Trustworthy AI for Mental Healthcare: Exploring Socio-Demographic Bias, Privacy Risks, and Collaborative Decision-Making,” Second Workshop on Artificial Social Intelligence, Glasgow, UK, 2024
2. “Exploring human-in-the-loop machine learning to enhance decision-making: Implications within the surgical operating theatre,” Hybrid Human-Machine Interaction in Surgery, The Hamlyn Symposium on Medical Robotics, London, UK, 2024
3. “Toward Trustworthy AI for Mental Healthcare: Exploring Socio-Demographic Bias, Privacy Risks, and Collaborative Decision-Making,” North American University, Houston, TX, 2024
4. “Fundamentals and Applications of Voice-Based Affect Recognition,” Affective Computing Course (Dr. Nadia Berthouze), University College London, 2024
5. “Toward Trustworthy AI for Mental Healthcare: Exploring Socio-Demographic Bias, Privacy Risks, and Collaborative Decision-Making,” Institute of Cognitive Science Colloquia, Univer-

- sity of Colorado Boulder, CO, 2024
6. “Challenges and opportunities in fostering trustworthy machine learning for multimodal data modeling in-the-wild,” Keynote Speaker at The 5th Workshop on Modeling Socio-Emotional and Cognitive Processes from Multimodal Data In-the-Wild (MSECP-Wild), ACM International Conference on Multimodal Interaction (ICMI), Paris, France, 2023
 7. “Human-Centered AI: Exploring Bias, Privacy, and Collaborative Decision-Making for Healthcare Advancements”, AI In Health Conference, Rice University, Houston, TX, 2023. https://www.youtube.com/watch?v=TJxUHYUytq0&list=PLcsG4X8Zn_UD0RemNKIfjqunT50S59n9C&index=8
 8. “Vocal and linguistic analysis of micro-behaviors in diverse team interactions,” IEEE Women in Engineering, IEEE ABQ Section Talk, 2023
 9. “Fundamentals and Applications of Voice-Based Affect Recognition,” Affective Computing Course (Dr. Nadia Berthouze), University College London, 2023
 10. “Emotion and Affective Speech Processing/Technology,” Invited survey talk, Interspeech, 2022. https://www.youtube.com/watch?v=_sUxrpch6bU
 11. “Personalized measures of invisible states for augmenting human cognition,” 1st Intl. Symposium on Understanding Inner States of Humans using Measurements of “Invisibles” – “Empatho-Kinaesthetic” Sensing, IEEE-EMBS BHI/BSN, 2022
 12. “Investigating dimensions of trust in human-AI collaboration for a speech-based data analytics task,” Hybrid DoD 6.1 Basic Research Conference, 2022
 13. “Toward trustworthy human-centered machine intelligence: Examining robustness, fairness, and privacy-preservation in multimodal models of human behavior,” University of Glasgow, 2022 (virtual)
 14. “Human-centered computing for well-being and workforce re-skilling: From reliable machine intelligence to trustworthy human-technology partnership,” University of California Los Angeles, 2022 (virtual)
 15. “Trustworthy machine intelligence for well-being and healthcare,” Cornell Tech, 2022 (virtual)
 16. “Trustworthy human-centered machine intelligence for well-being and healthcare,” Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA, 2022
 17. “Investigating Human Trust in AI: A Case Study of Human-AI Collaboration on a Speech-Based Data Analytics Task,” Trusted AI Challenge Grant Award Presentations, AFRL/RI Rome, NY
 18. “Human-centered machine intelligence: From robust signal analytics to trustworthy human-technology partnership,” Center for Information & Systems Engineering, Boston University, Boston, MA, 2022
 19. “Human-centered computing: From robust signal analytics to trustworthy human-AI partnership,” Institute of Cognitive Science, University of Colorado Boulder, Boulder, CO, 2022
 20. “Human-centered computing: From robust signal analytics to trustworthy human-AI partnership,” Rehg Lab Meeting, School of Interactive Computing, Georgia Institute of Technology, 2022 (virtual)
 21. “Human-centered machine intelligence: From robust signal analytics to trustworthy human-AI partnership,” School of Electrical Engineering and Telecommunications, University of New South Wales, 2022 (virtual)
 22. “Enabling trustworthy speech technologies for mental healthcare,” NSF - Cleveland Clinic Workshop, 2021. URL: http://webcast1.ccf.org/viewerportal/ccfe/video.vp?programId=esc_program%3A134592 (virtual)
 23. “Exploring Fairness and Socio-demographic Bias in Machine Learning,” Texas A&M Data Science Institute, 2021 (virtual)
 24. “Human-centered computing for health and well-being: From reliable machine intelligence to trustworthy human-technology partnerships,” University of Houston, 2021 (virtual)
 25. “Human-centered computing for health and well-being: From reliable machine intelligence to trustworthy human-technology partnerships,” National Technical University of Athens, 2021 (virtual)
 26. “Investigating human trust in AI: A case-study of human-AI collaboration on a speech-based

- data analytics task,” Trusted AI At Scale Workshop, AFOSR, 2021 (virtual)
27. “Investigating human trust in AI: A case-study of human-AI collaboration on a speech-based data analytics task,” AFOSR PI Meeting, Trust & Influence Program, 2021 (virtual)
 28. “How can emotion recognition and VR be used for interview training?,” Texas A&M Institute for Engineering Education & Innovation, 2021 (virtual)
 29. “Designing personalized and privacy-aware machine learning for promoting well-being, health, and education,” North Carolina State University, Department of Electrical Engineering, 2020 (virtual)
 30. “Designing personalized and privacy-aware machine learning for promoting well-being, health, and education,” Texas A&M University, Department of Statistics, 2020 (virtual)
 31. “Metric learning techniques to capture relativity in human behavior,” TILES Summer School, 2020 (virtual)
 32. “Designing machine learning for addressing individual variability, data scarcity, and privacy concerns in health and education,” UT San Antonio, 2020 (virtual)
 33. “Personalized, low-resource, and privacy-aware machine learning models of human behavior,” Amazon Lab126, San Jose, CA, 2020
 34. “Quantifying the effect of virtual reality interventions to public speaking anxiety,” TAMIDS Workshop on Data Science/AI/ML in Education, Texas A&M Data Science Institute, College Station, TX, 2019
 35. “Computational models of human behavior for education and well-being applications,” Applied Mathematics Undergraduate SEminar (AMUSE), Department of Statistics, Texas A&M University, College Station, TX, 2019
 36. “Population-specific models of human behavior for well-being and education,” University of Texas Dallas, Dallas, TX, 2019
 37. “Coupling individual characteristics, contextual factors, and environmental stimuli for augmenting human performance,” Army Research Lab, Aberdeen, MD, 2019
 38. “Exploring physiological signals for augmenting human well-being in the construction and built environment,” Department of Construction Science, Texas A&M University, College Station, TX, 2019
 39. “Human bio-behavioral signals for the development of novel real-life applications,” Rice University, Houston, TX, 2018
 40. “Bio-Behavioral Signals and Systems: From signal representations to novel health applications,” CU Boulder, San Diego State University, SUNY Buffalo, Texas A&M, Washington University in St. Louis, 2017
 41. “Knowledge-driven physiological representations for analyzing and interpreting wearable sensor signals,” Big Data and Human Behavior Symposium, University of Southern California, 2016 (**Best presentation award**)
 42. “Quantifying Physiological Synchrony in Romantic Relationships with Joint Sparse Representation,” Computational Mental Health Workshop, Society for Personality and Social Psychology (SPSP) Annual Convention, 2016
 43. “Knowledge-driven representations of physiological signals: Developing measurable indices of non-observable behavior,” Flash talk, USC Ming Hsieh Institute Research Festival, University of Southern California, 2015
 44. “Markov Chain Monte Carlo inference of parametric dictionaries for sparse Bayesian approximations,” Flash talk, MBMC Workshop: Communications, Inference and Computing in Molecular and Biological Systems, University of Southern California, 2015
 45. “Introduction to Biomedical Signal Processing,” Wireless and Mobile Networks Design and Laboratory, University of Southern California, 2015
 46. “Analyzing the structure of narratives from children with ASD,” Annual Meeting of NSF Expedition Project in Computational Behavioral Science, Carnegie Mellon University, 2013

STUDENTS
ADVISED

Post-Doctoral Research Associates

1. Jinwoo Kim, 2022-2023 (Position after graduation: Gachon University)

Ph.D. Students

1. Jinwoo Kim (co-advised), Graduated 2022
2. Md Nazmus Sakib (co-advised), Graduated 2022
3. Projna Paromita, Graduated 2023
4. Md Ehsanul Haque Nirjhar, Graduated 2024
5. Kexin Feng, Estimated 2025
6. Abdullah Aman Tutul, Estimated 2025
7. Raquel Yupanqui, Estimated 2027
8. Caroline Wendt, Estimated 2028
9. Siddharth Kalyanasundaram, Estimated 2028

M.S. Students

1. Shrivatsa Mishra (2025)
2. Ghritachi Mahajani (2025)
3. Pranjal Aggarwal (2025)
4. Vaibhav Jamadagni (2025)
5. Pavan Kumar Malasani (2025)
6. Jason Raether, Thesis title: “*Investigating the effects of physiology-driven vibro-tactile biofeedback for mitigating state anxiety during public speaking*” (2022, Position after graduation: Google)
7. Ravikiran Ramesh, Thesis title: “*Emotion Detection with Privacy Preservation Using Adversarial Learning*” (2021)
8. Shravani Sridhar, Thesis title: “*Quantifying the Impact of Speech Intelligibility in Task Performance via Physiological Signals*” (2021)
9. Varsha Venkataramu, Thesis title: “*Personalized estimation of daily emotions and interpersonal conflict between romantic partners via metric learning*” (2021)
10. Akansha Agarwal, Thesis title: “*Exploring real-time bio-behaviorally aware feedback interventions for mitigating public speaking anxiety*” (2021, Position after graduation: Cisco)
11. Manseerat Batra, Thesis title: “*Toward sensor-based early diagnosis of cognitive impairment of elderly adults in smart-home environments using Poisson process models*” (2021)
12. Prakhar Mohan, Thesis title: “*Quantifying elderly routine behaviors in a smart home environment*” (2020, Position after graduation: Amazon)
13. Vansh Narula, Thesis title: “*Privacy-Preserving Image-Based Emotion Recognition*” (2020, Position after graduation: Walmart Research)
14. Megha Yadav, Thesis title: “*Detecting Public Speaking Anxiety in Real-Life*” (2019, Position after graduation: Cisco)
15. Alyssa Pena (2018)
16. Krit Gupta (2019, Position after graduation: Amazon)
17. Niraj Goel (2018, Position after graduation: Amazon)
18. Aditya Gujral (2018, Position after graduation: Uber)

B.S. Students

1. Eric Fithian, Thesis title: “*Designing multimodal generative transformers for estimating job interview performance*” (2025)
2. Alexandria Curtis
3. Albin “Kyle” Myscich, Thesis title: “*A linguistic analysis to quantify over-explanation and under-explanation in job interviews*” (2022)
4. Vinesh Ravuri
5. Anjali Segu
6. Huong “Penny” Vo
7. Michael Yang
8. Jasmine Leu, Thesis title: “*Exploring psycholinguistic features related to public speaking anxiety*” (2021)

9. Shreya Nakkala, Thesis title: “*Analyzing and Understanding the Impact of COVID-19 Era Vlogs*” (2021)
10. Sacheth Swaminathan, Thesis title: “*Using linguistic and auditory analysis to diagnose anxiety in public speaking*” (2021)
11. Venkata Subbu Lakshmi Aparna Dubagunta (2020)
12. Minji Choi (2020)
13. Kexin Feng (2020)
14. Cameron Lopez, Thesis title: “*Exploring transfer learning focused on physiological signals for emotion recognition*” (2020)
15. Siman Shrestha (2020)
16. Maggie von Ebers (2020)

B.S. Interns

1. Abd-Allah El Attar (2021)
2. George Hadjiantonis (2019)
3. Yi Shen (2018)

Ph.D. Thesis Examiner

1. Abeer Almoallad, University of Warwick, 2024
2. Jingyao Wu, University of New South Wales, 2024
3. Jian Sun, The University of Sydney, 2023

SERVICE AND PROFESSIONAL ACTIVITIES

Professional Societies

Institute of Electrical and Electronics Engineers (IEEE), Member
 Engineering in Medicine and Biology Society (EMBS), Member
 Association for Computing and Machinery (ACM), Member

Review Services

ACM Health • Annals of Biomedical Engineering • Behavioral Brain Research • Behavior Research Methods • Clinical Psychology and Pharmacology • Frontiers in Digital Health • IEEE Journal of Biomedical and Health Informatics • IEEE Sensors Journal • IEEE Transactions on Affective Computing • IEEE Signal Processing Letters • IEEE Transactions on Applied Perception • IEEE Transactions on Biomedical Engineering • IEEE Transactions on Human-Machine Systems • International Journal of Human-Computer Studies • Journal of Electrical and Computer Engineering • Journal of Optimization Theory and Applications • MDPI Journal of Sustainability • MDPI Sensors • Nature Scientific Reports • PlosOne

ACM International Conference on Multimodal Interaction • ACM International Conference on Pervasive and Ubiquitous Computing • IEEE International Joint Conference on Neural Networks • IEEE Control Systems Society Conference Management System • IEEE Body Sensor Networks • IEEE/ACM Conference on Connected Health • IEEE Visualization

Journal Editorials

- Associate Editor, IEEE Transactions on Affective Computing, 2024-Present
- Editor, Elsevier Computer Speech & Language, 2021-Present
- Guest Editor, Special Issue on Multimodal Interaction Technologies for Mental Well-Being, Frontiers in Computer Science, 2024
- Guest Editor, Special Issue on Unobtrusive Physiological Measurements, IEEE Transactions on Affective Computing, 2023 (<https://ieeexplore.ieee.org/document/10330547>)
- Guest Editor, Sensors for Behavioral Science - Social, Affective, and Cognitive Science Perspectives, MDPI Sensors, 2020

Professional Society Committees

- Chair, Diversity Subcommittee, IEEE Signal Processing Society Membership Board, 2025-2027
- Organizing Committee Member, PROMotinG DiveRsity in Signal ProcESSing (PROGRESS), IEEE Signal Processing Society, 2023-Present

Conference Organization Committees

- Program Co-Chair, ISCA Interspeech 2027
- Tutorial Co-Chair, International Conference on Affective Computing and Intelligent Interaction (ACII), 2025
- Program Co-Chair, ACM International Conference on Multimodal Interaction (ICMI) 2024
- Associate Editor, IEEE Engineering in Medicine and Biology Conference (EMBC) 2023
- Doctoral Consortium Co-Chair, IEEE Affective Computing and Intelligent Interaction (ACII) 2023
- Workshop Co-Chair, ACM International Conference on Multimodal Interaction (ICMI) 2023
- PROMotinG DiveRsity in Signal ProcESSing (PROGRESS) Workshop Local Chair, IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2023
- Student and Young Professional Activities Co-Chair, IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2023
- Session Organizer, Data Science for Behavioral and Mental Health, Workshop on Advances in Data Science: Theory, Methods, and Computation, Institute for Applied Mathematics and Computational Science, TAMU 2022
- Publicity Co-Chair, IEEE/ACM Connected Health: Applications, Systems and Engineering Technologies (CHASE) 2022
- Doctoral Consortium Co-Chair, ACM International Conference on Multimodal Interaction (ICMI) 2022
- Sponsorship Co-Chair, International Conference on Affective Computing & Intelligent Interaction (ACII) 2022
- Co-Chair, Health Day, ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2022
- Reviewer, Association for the Advancement of Affective Computing (AAAC) Dissertation Award
- Publicity Co-Chair, IEEE Affective Computing and Intelligent Interaction (ACII) 2021
- Senior Program Committee Member, Socially-Informed AI for Healthcare: Understanding and Generating Multimodal Nonverbal Cues, ACM International Conference on Multimodal Interaction (ICMI) 2021
- Associate Editor, IEEE Engineering in Medicine and Biology Conference (EMBC) 2021
- Sponsorship Co-Chair, International Conference on Affective Computing & Intelligent Interaction (ACII) 2021
- Local Organizing Co-Chair, ACM Intelligent User Interfaces (IUI) 2021
- Workshop Co-Chair, Transdisciplinary AI (TransAI) 2021
- Conference Program Committee, PErsasive Technologies Related to Assistive Environments (PETRA) 2021
- Workshop Co-Chair, Transdisciplinary AI (TransAI) 2020
- Publication Co-Chair, ACM International Conference on Multimodal Interaction (ICMI) 2020
- Associate Editor, IEEE Engineering in Medicine and Biology Conference (EMBC) 2020
- Technical Program Committee Member, Audio Visual Emotion Challenge (AVEC) 2019
- Program Committee Member, Transdisciplinary AI 2019
- Senior Program Committee Member, Interspeech 2019
- Associate Editor, IEEE Engineering in Medicine and Biology Conference (EMBC) 2019
- Senior Program Committee Member, IEEE Body Sensor Networks (BSN) 2019
- Doctoral Consortium Co-Chair, International Conference on Affective Computing & Intelligent Interaction (ACII) 2019
- Senior Program Committee Member, ACM International Conference on Multimodal Interaction (ICMI) 2018

- Workshop Chair, IEEE Body Sensor Networks (BSN) 2018
- Local Organizing Co-Chair, IEEE Affective Computing and Intelligent Interaction (ACII) 2017

Workshop Committees

- Organizing Committee Member, Workshop for Young Female Researchers in Speech Science & Technology, ISCA Interspeech 2024
- Organizing Committee Member, Trustworthy Speech Processing (TSP), IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024
- Organizing Committee Member, Trustworthy and responsible data analytics for mental health, IEEE Conference on Biomedical Health Informatics (BHI), 2023
- Organizing Committee Member, 4th International Workshop on Multimodal Affect and Aesthetic Experience (MAAE), ACM International Conference on Multimodal Interaction (ICMI), 2023
- Organizing Committee Member, 3rd International Workshop on Multimodal Affect and Aesthetic Experience (MAAE), ACM International Conference on Multimodal Interaction (ICMI), 2022
- Organizing Committee Member, 2nd International Workshop on Multimodal Affect and Aesthetic Experience (MAAE), ACM International Conference on Multimodal Interaction (ICMI), 2021
- Organizing Committee Member, 1st International Workshop on Multimodal Affect and Aesthetic Experience (MAAE), ACM International Conference on Multimodal Interaction (ICMI), 2020
- Organizing Committee Member, Workshop for Young Female Researchers in Speech Science & Technology, ISCA Interspeech 2019
- Organizing Committee Member (with Daphney Stavroula Zois, Charalampos Chelmiss, Reihaneh Rabbany, Yasin Yilmaz), Signal Processing and Machine Learning for Social Good, IEEE Global Conference on Signal and Information Processing (GlobalSIP) 2019
- Organizing Committee Chair (with Angeliki Metallinou, Leah Stein, Amir Behzadan), Human-Habitat for Health (H3): Human-habitat multimodal interaction for promoting health and well-being in the Internet of Things era, ACM International Conference on Multimodal Interaction (ICMI) 2018

Conference Session Chair/Co-Chair

- Session Chair, Conversation, Dialogue Systems and Language Analytics, ACM International Conference on Multimodal Interaction (ICMI) 2021
- Session Chair, Signal Processing and Machine Learning for Social Good I, IEEE Global Conference on Signal and Information Processing (GlobalSIP) 2019
- Session Chair, Physiological Modeling, ACM International Conference on Multimodal Interaction (ICMI) 2018
- Session Chair, Energy Efficient Design and Sensing, IEEE Body Sensor Networks (BSN) 2018

Proposal Review Panelist

- National Science Foundation, Directorate for STEM Education (EDU), 2025
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2024
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2023
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2022
- National Science Foundation, Directorate for Engineering (ENG), 2022
- Swiss National Science Foundation (SNSF), 2022
- Dutch Research Council (NWO), Domain Applied and Engineering Sciences (AES), 2022
- National Science Foundation, Directorate for Engineering, 2021
- National Science Foundation, Directorate for Education and Human Resources, 2021
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2021
- Canada Research Coordinating Committee, New Frontiers in Research Fund – Exploration, 2020

- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2020
- Dutch Research Council (NWO), Domain Applied and Engineering Sciences (AES), 2020
- National Science Foundation, Directorate for Education & Human Resources (EHR), 2019
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2019
- National Science Foundation, Directorate for Computer & Information Science & Engineering (CISE), 2017

University Service

- Member, University of Colorado Boulder CS Faculty Hiring Committee, 2024
- Member, University of Colorado Boulder Graduate Committee, 2023-Present
- Member, Texas A&M Council of Principal Investigators, 2021-2023
- Member, Texas A&M CSCE Faculty Hiring Committee, 2022-2023
- Member, Texas A&M Qatar Faculty Hiring Committee, 2022
- Member, Texas A&M CSCE Advisory Committee, 2019-2020, 2020-2021, 2021-2022, 2022-2023
- Member, Texas A&M CSCE PhD Admissions Committee, Texas A&M University, 2017-2019, 2020-2021, 2021-2022
- Member, Texas A&M CSCE MS in AI Committee, Texas A&M University, 2021-2022

Community Outreach & Education

- Co-Lead, Google Summer REU on Data Science, Co-organized with Risa Meyer, Rice University (Lead) and Noushin Gaffari, PVAMU (Co-Lead) 2023
- Panel speaker, AI in Health Conference, Rice Ken Kennedy Institute, 2022
- Panel moderator, AI/OR Workshop, Computing Community Consortium (CCC), 2022
- Invited speaker, TAMU Data Science Club, 2022
- Invited speaker, K12 GenCyber Summer Camp, Texas A&M Cybersecurity Center, 2021
- Faculty mentor, Summer Research Internship, Halliburton Engineering Global Programs, 2018-2019, 2021
- Invited speaker, CLC Educational Institute, 2021
- Invited speaker, TAMU Institute for Engineering Education & Innovation, Gender and racial bias in tech industry hiring, “How Emotion Recognition & VR can be used for job interview training?,” 2021
- Panel speaker, Roundtable on Human-Centered AI, Dot Dot Dot Media, 2020
- Faculty judge, TAMU Hack, Texas A&M University, 2018
- Panel speaker, 9th Aggie Women in Computer Science Leadership Workshop, Texas A&M University, 2018
- Panel speaker, Texas A&M Graduate Society of Women Engineers, Texas A&M University, 2018
- Faculty mentor, Research Experience for Teachers and Young Scholars program, NSF Engineering Research Center at Texas A&M (PATHS-UP), 2018

MEDIA COVERAGE

- **Responsible AI (2022-2024)**

The work focuses on designing trustworthy human-centered AI algorithms has been featured in *Texas A&M Today*, *KAGS (NBC)*, and *WWL* (appeared four times)

<https://www.kagstv.com/article/news/local/texas-a-m-u/experts-from-texas-am-share-their-t-499-88545380-8501-469d-93bc-76bcc1e93285>

<https://www.audacy.com/podcast/wwl-first-news-with-tommy-tucker-34f17/episodes/what-is-ar>

<https://www.audacy.com/podcast/wwl-first-news-with-tommy-tucker-34f17/episodes/just-how-g>

- **Fairness and Bias in AI (2021, 2024)**

The work focuses on identifying sources of social bias in AI and has been featured in *Texas A&M* and local news websites (*KBTX*)

<https://www.kbtv.com/2021/08/19/treat-day-am-professor-wins-prestigious-award/>

Research on empirical evidence of algorithmic bias in speech-based machine learning algorithms

for mental health was featured at CU Boulder Today, 9News (NBC), Forbes India, and The Star.

- **Privacy-preserving speech emotion recognition (2019)**

The work focused on learning privacy-preserving speech patterns for emotion recognition has been featured in *Texas A&M* websites.

- **Public speaking bio-feedback interventions (2018)**

The work on modeling public speaking anxiety through wearable devices and developing automated real-life interventions has been reported in *Communications of the ACM*, *Future Science News*, *Texas A&M Spirit Magazine*, and *Texas A&M* websites.

- **Romantic couples' automatic conflict detection in real-life (2017-2018)**

The interdisciplinary work on modeling and quantifying romantic couples' relationships has been reported in *Wall Street Journal*, *NBC*, *BBC Future*, *Daily Mail*, *TechCrunch*, *IEEE Spectrum*, *Digital Trends*, *CNET*, *Yahoo News*, *Science Newsline*, etc.