Bobak Jack Mortazavi

http://stmilab.github.io/ 979.458.2642 bobakm@tamu.edu

RESEARCH THEMES

- Systems and Analytics for Personalized Digital Health: Design of machine learning methods for clinical outcomes using multimodal modeling and clinician-in-the-loop time-varying, dynamic risk prediction.
- **Personalized Sensing and IoMT**: Design of analytics to connect Internet of Medical Things to clinical outcomes research for personal and remote sensing and digital health.
- Translational Clinical Outcomes Research: Implement techniques to enable clinical translation and facilitate clinical interventions, observational comparative effectiveness, and improve outcomes.

HIGHLIGHTS

- Research: Establishing research that serves as an integral bridge for interdisciplinary teams in creating novel sensing, developing advanced analytics, and facilitating clinical translation.
 Google Scholar H-Index: 31.
 - Produced first analytic models to automate diet monitoring from continuous glucose monitors.
 - Designed advanced analytics for novel wearable sensors to create cuffless blood pressure monitors.
 - Developed new machine learning techniques for dynamic, adaptable clinical outcomes research.
- **Teaching:** Design of machine learning classes to promote digital health. Teaching machine learning and capstone courses with a focus on translation.
- Advising: Graduated our department's first MD PhD graduate, and have graduated 4 PhD students as of Fall '24, with one taking a postdoc at Stanford University, one a medical residency at University of Wisconsin, one works in industry at Visa, and another in industry at AMD.
- Service: Integrating objectives and connecting communities through service.
 - Serving cross-cutting disciplines in engineering (Associate editor ACM Transactions on Computing for Healthcare) and health sciences (Associate statistical editor, AHA Circulation: Cardiovascular Quality and Outcomes), and the Journal of the American College of Cardiology
 - Served in conference organization leadership for several flagship conferences including IEEE BSN,
 IEEE BHI, and AHLI CHIL. Serving as Technical Program Committee Chair for BHI'24.

June 2016—September 2017

General Chair for the IEEE EMBS International BSN '25 and BHI '25 Conferences.

PROFESSIONAL APPOINTMENTS

Texas A&M University; College Station, TX Associate Professor with Tenure, Department of Computer Science & Engineering Center for Remote Health Technologies and Systems	September 2023 Present
Texas A&M University; College Station, TX Assistant Professor, Department of Computer Science & Engineering Center for Remote Health Technologies and Systems	August 2017—August 2023
Yale University; New Haven, CT Assistant Professor Adjunct, Yale School of Medicine Center for Outcomes Research and Evaluation	September 2017—Present

Yale University; New Haven, CT

Instructor, Cardiology, Yale School of Medicine Center for Outcomes Research and Evaluation University of California Los Angeles; Los Angeles, CA

Lecturer

June 2014--August 2014

California State Polytechnic University Pomona; Pomona, CA

Lecturer

March 2012--March 2013

CONSULTING APPOINTMENTS

McAndrews, Held and Malloy, LTD; Chicago, IL, Kirkland & Ellis, LLP; Boston, MA

June 2022 — Present

(Forensic) Expert in Software Analysis

O'Melveny and Myers, LLP; San Francisco, CA

December 2011—January 2015

(Forensic) Non-Testifying Consultant in Software Analysis

EDUCATION

Yale University; New Haven, CT

August 2014—June 2016

Postdoctoral Associate, Yale School of Medicine and Department of Statistics

Center for Outcomes Research and Evaluation

Supervisors: Harlan Krumholz and Sahand Negahban

University of California Los Angeles; Los Angeles, CA

September 2009—June 2014

Ph.D. Computer Science

Realistic-Motion Activity Recognition: Wearable Sensors, Reconfigurable Systems, Machine Learning

Advisor: Majid Sarrafzadeh

University of California Irvine; Irvine, CA

September 2007—June 2009

M.S. Electrical and Computer Engineering

University of California Berkeley; Berkeley, CA

August 2003—May 2007

B.S. Electrical Engineering and Computer Science

B.A. Applied Mathematics (with Specialization in Computer Science Algorithms)

AWARDS and HONORS

- 2024 Texas A&M Research Leadership Fellow
- 2023 Texas A&M Institute of Data Science Career Initiation Fellow
- 2023 Texas A&M Engineering Experiment Station Young Faculty Fellow
- 2022 ICML Conference top 10% Reviewer
- 2021 AAAI Conference top 25% Reviewer
- 2020 Engineering Genesis Award Texas A&M College of Engineering
- 2018 Best Poster Award Runner Up 2018 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN)
- Best Demo Award 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012) – Soccer Exergaming
- Finalist UCLA Business of Science Center Venture Competition funRehab: A Mobile Rehabilitation Gaming System - Spring 2012
- Student Advisee Awards:
 - o Zhale Nowroozilarki: Texas A&M University Future Faculty Fellowship.
 - Zhale Nowroozilarki: Student Travel Award, 2024 IEEE BHI Conference
 - Ryan King: Student Travel Award, 2024 IEEE BHI Conference
 - o Sicong Huang: Student Travel Award, 2023 IEEE BSN Conference
 - Sicong Huang: Student Travel Award, 2023 IEEE BHI Conference
 - o Justin Lovelace: Outstanding Undergraduate Honors Thesis Award, 2019.

SELECTED PUBLICATIONS

Nowroozilarki Z, Huang S, Khera R, Mortazavi B (2024) Non-Invasive Electrolyte Estimation Using Multi-Lead ECG Data via Semi-Supervised Contrastive Learning with an Adaptive Loss. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 24) (Acceptance Rate: 25.8%)

Zhang L, Mortazavi B (2023) Semi-supervised Meta-learning for Multi-source Heterogeneity in Time-series Data *Machine Learning for Healthcare Conference (MLHC)*

Martinez J, Nowroozilarki Z, Jafari R, Mortazavi B (2022) Data-Driven Guided Attention for Analysis of Physiological Waveforms with Deep Learning. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*

Dhruva S, Ross J, Mortazavi B, Hurley N, Krumholz H, Curtis J, Berkowitz A, Masoudi F, Messenger J, Parzynski C, Ngufor C, Girotra S, Amin A, Shah N, Desai N (2020) Association of Use of an Intravascular Microaxial Left Ventricular Assist Device vs. Intra-aortic Balloon Pump With In-Hospital Mortality and Major Bleeding Among Patients with Acute Myocardial Infarction Complicated by Cardiogenic Shock. *JAMA*.

Complete Publications List (below and here): https://scholar.google.com/citations?user=TOAg4GkAAAAJ&hl=en

On-Going Externally Funded Projects

[E12] NIH/NHLBI 1 R01 HL167858-01A1 (PI: Rohan Khera): "Translating Personalized Inference from Randomized Clinical Trials to Real-World Cardiovascular Care" 2024-2029, Total Award Amount: \$4,183,131. Role: Co-I (my contribution: \$184,548)

[E11] NIH/NIDDK 1 R01 DK136414 (PI: Mike McShane): "Minimally-invasive Technology for Personalized Nutritional Monitoring" 2023-2028, Total Award Amount: \$3,132,554. Role: Co-I (my contribution: \$496,332)

[E10] NSF IIS 2014475 (PI: Bobak Mortazavi): "SCH: INT: Personalized Models of Nutrition Intake from Continuous Glucose Monitors" 2020-2025, Total Award Amount: \$1,099,881. Role: PI (my contribution: \$353,428)

[E9] NIH/NHLBI 1 R01 HL151240-01 (PI: Roozbeh Jafari): "An Unobtrusive Continuous Cuff-less Blood Pressure Monitor for Nocturnal Hypertension" 2020-2025, Total Award Amount: \$3,514,242. Role: Co-I (my contribution: \$380,379)

Completed Externally Funded Projects

[E8] NIH/NIBIB Trailblazer 1 R21 EB028486-01 (PI: Bobak Mortazavi): "Estimating Trajectory of Recovery in Cardiac Rehabilitation using Mobile Health Technology and Personalized Machine Learning," 2019-2023, Total Award Amount: \$562,970. Role: PI (my contribution: \$474,339)

[E7] NIH/NHLBI 1 R01 HL142765-01A1 (PI: James Freeman): "Safety and Effectiveness of Left Atrial Appendage Closure in Atrial Fibrillation (SAFELY-AF)", 2019-2023, Subaward Total Award Amount: \$78,708 Role: Co-I (my contribution: \$78,708)

[E6] NIH/NIBIB 1 R01 EB028106-01 (PI: Roozbeh Jafari): "SCH: Int: A Context-aware Cuff-less Wearable Ambulatory Blood Pressure Monitor using Bio-Impedance Sensor Array" 2019-2023, Total Award Amount: \$1,200,000 Role: Co-I (my contribution: \$200,000)

[E5] DARPA FA8750-18-2-0027 (PI: First two years Atlas Wang, final three years Bobak Mortazavi): "Context-Aware Biomarker Discovery and Health Monitoring by Adaptive Integration of Heterogeneous Smartphone Signals", 2018-2022, Total Award Amount: \$1,956,729 Role: PI (my contribution: \$903,832)

[E4] NIH/NIMHD 1U54MD010711-01 (PI: Marcella Nunez-Smith, Study PI: Erica Spatz): "Yale Transdisciplinary Collaborative Center for Health Disparities", 2016-2021, Total Award Amount: \$1,927,764 Role: Co-I (my contribution \$59,814)

[E3] NIH/NHLBI 1 R56 HL142765-01 (PI: James Freeman): "Safety and Effectiveness of Left Atrial Appendage Closure in Atrial Fibrillation (SAFELY-AF)", 2018-2019, Subaward Total Award Amount: \$19,677 Role: Co-I (my contribution: \$19,677)

[E2] FDA (PI: Joe Ross, Study PI: Nihar Desai): "CERSI: Center of Excellence in Regulatory Science and Innovation" 2018, Total Award Amount: \$147,639 Role: Co-I (my contribution: \$46,822)

[E1] NSF (IIS) 1749562 (PI: Bobak Mortazavi): "Student-Author Travel Grant for the International Conferences on Biomedical and Health Informatics and on Wearable and Implantable Body Sensor Networks 2018", 2017-2018, Total Award Amount: \$19,970 Role: PI (my contribution: \$19,970)

TEACHING

Texas A&M University

- CSCE 421/H: Machine Learning (Ugrad) (and Honors Section) (Fall '20, '21, Spring '23)
- CSCE 482: Senior Capstone Design (Ugrad) (Spring '18, '19)
- CSCE 689: Medical Sensing and Analytics (Grad) (Fall '17)
- CSCE 633-Online: Machine Learning (Grad) (Spring '23, '24, Summer '24, Fall '24)
- CSCE 633: Machine Learning (Grad) (Fall '18, '19, '23, '24, Spring '24)

UCLA

- CS M51A: Logic Design (Lecturer- Summer '14)
- CS 152B: Digital Design Project Lab (Teaching Fellow Fall '10, Spring '11, Summer '11, Spring '13, Fall '13, Winter '14, Spring '14)
- CS 152A: Introduction to Digital Design (Teaching Assistant Winter '12)

Cal Poly Pomona

• ECE 204L/205L: Introduction to Combinational Logic, Introduction to Sequential Logic (Lecturer – Spring '12, Fall '12, Winter '13)

UC Berkeley

• CS 3: Introduction to Symbolic Programming (Undergraduate Student Instructor – Fall '05, Spring '06, Fall '06, Spring '07)

PUBLICATIONS

Journals

[j62] Shimbo D, Shah RU, Abdalla M, Agarwal R, Ahmad FS, Anaya G, Attia ZI, Bull S, Chang AR, Commodore-Mensah Y, Ferdinand K, Kawamoto K, Khera R, Leopold J, Luo J, Makhni S, Mortazavi BJ, Oh Y, Savage L, Spatz E, Stergiou G, Turakhia M, Whelton P, Yancy C, Iturriga E (2024) Transforming Hypertension Diagnosis and Management in The Era of Artificial Intelligence: A 2023 National Heart, Lung, and Blood Institute (NHLBI) Workshop Report. *Hypertension*. 2024 Jul 16.

- [j61] Holste G, Oikonomou E, Mortazavi BJ, Wang Z, Khera R (2024) Efficient Deep Learning-based Automated Diagonsis From Electrocardiography with Contrastive Self-Supervised Learning. *Nature Communications*. 1 (4) 133.
- [j60] Sherak R, Sajjadi H, Khimani N, Tolchin B, Jubanyik K, Taylor RA, Schulz W, Mortazavi BJ, Haimovich A (2024) SOFA Score Performs Worse Than Age For Predicting Mortality in Patients with COVID-19. *PLOS One* 5 (19) e0301013.
- [j59] Huang S, Jafari R, Mortazavi BJ (2024) Pulse2AI: An Adaptive Framework to Standardize and Process Pulsatile Wearable Sensor Data for Clinical Applications. *IEEE Open Journal of Engineering in Medicine and Biology*. (in press)
- [j58] Faridi KF, Ong EL, Zimmerman S, Varosy PD, Friedman DJ, Hsu JC, Kusumoto F, Mortazavi BJ, Minges KE, Pereira L, Lakkireddy D, Koutras C, Denton B, Mobayed J, Curtis J, Freeman J (2023) Predicting Major Adverse Events in Patients Undergoing Transcatheter Left Atrial Appendage Occlusion. *Circulation: Arrhythmia and Electrophysiology*. 2024 Feb 23:e012424.
- [j57] Lin F, Qian X, Mortazavi B, Wang Z, Huang S, Chen C (2023) Modeling User Choice Behavior under Data Corruption: Robust Learning of the Latent Decision Threshold Model. *Institute of Industrial and Systems Engineers* (*IISE*) *IISE Transactions*.
- [j56] Sangha V, Nargesi A, Dhingra L, Khunte A, Mortazavi B, Ribeiro A, Banina E, Adeola O, Garg N, Brandt C, Miller E, Riberiro A, Velazquez E, Giatti L, Barreto S, Foppa M, Yuan N, Ouyang D, Krumholz H, Khera R (2023) Detection of Left Ventricular Systolic Dysfunction from Electrocardiographic Images. *Circulation* 148, pp 765-777.
- [j55] Nowroozilarki Z, Mortazavi B, Jafari R (2023) Variational Autoencoders for Biomedical Signal Morphology Clustering and Noise Detection. *IEEE Journal of Biomedical and Health Informatics (J-BHI)* (in press)
- [j54] Hurley N, Dhruva S, Desai N, Ross J, Ngufor C, Masoudi F, Krumholz H, Mortazavi B (2023) Clinical Phenotyping with an Outcomes-Driven Mixture of Experts for Patient Matching and Risk Estimation. *ACM HEALTH* 4 (4), pp 1-18.
- [j53] Chikwetu L, Daily S, Mortazavi B, Dunn J (2023) Automated Diet Capture Using Voice Alerts and Speech Recognition on Smartphones: Pilot Usability and Acceptability Study. *JMIR Formative Research*. (in press)
- [j52] Holste G, Oikonomou E, Mortazavi B, Coppi A, Faridi K, Miller E, Forrest J, McNamara R, Ohno-Machado L, Yuan N, Gupta A, Ouyang D, Krumholz H, Wang Z, Khera R (2023) Severe Aortic Stenosis Detection by Deep Learning Applied to Echocardiography. *European Heart Journal*. (in press)
- [j51] Khunte A, Sangha V, Oikonomou E, Dhingra L, Aminorroaya A, Mortazavi B, Coppi A, Brandt C, Krumholz H, Khera R (2023) Detection of Left Ventricular Systolic Dysfunction from Single-Lead Electrocardiography Adapted for Wearable Devices. *NPJ Digital Medicine* (in press).
- [j50] Martinez J, Passage B, Mortazavi B, Jafari R (2023) Hypothesis Scoring for Confidence-Aware Blood Pressure Estimation with Particle Filters. *IEEE Journal of Biomedical and Health Informatics* (in press)
- [j49] Mortazavi B, Martinez-Brockman J, Tessier-Sherman B, Burg M, Miller M, Nowroozilarki Z, Adams OP, Maharaj R, Nazario CM, Nunez M, Nunez-Smith M, Spatz E (2023) Classification of blood pressure during sleep impacts designation of nocturnal nondipping. *PLOS Digital Health*. (in press)
- [j48] Liu Y, Herrin J, Huang C, Khera R, Dhingra L, Dong W, Mortazavi B, Krumholz H, Lu Y (2023) Nonexercise machine learning models for maximal oxygen uptake prediction in national population surveys. *Journal of the American Medical Informatics Association*. 30 (5), 943-952.
- [j47] Lu Y, Linderman G, Mahajan S, Liu Y, Huang C, Khera R, Mortazavi B, Spatz E, Krumholz H (2023) Quantifying Blood Pressure Visit-to-Visit Variability in the Real-World Setting: A Retrospective Cohort Study. *Circulation: Cardiovascular Quality and Outcomes (CIRCOUTCOMES)*. (in press)
- [j48] Caraballo C, Mahajan S, Murugiah K, Mortazavi B, Lu Y, Khera R, Krumholz H (2023) Timing of Blood Draws Among Patients Hospitalized in a Large Academic Medical Center. *Journal of the American Medical Association (JAMA)*. 329 (3), 255-257.

- [j46] Martinez J, Nowroozilarki Z, Jafari R, Mortazavi B (2022) Data-Driven Guided Attention for Analysis of Physiological Waveforms with Deep Learning. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. (in Press)
- [j45] Martinez J, Sel K, Mortazavi B, Jafari R (2022) Boosted-SpringDTW for Comprehensive Feature Extraction of PPG Signals. *IEEE Open Journal of Engineering in Medicine and Biology (OJEMB)*. 3, 78-85
- [j44] Sangha V, Mortazavi B, Haimovich A, Riberio A, Brandt C, Jacoby D, Schulz W, Krumholz H, Ribeiro A, Khera R (2022) Automated Multilabel Diagnosis on Electrocardiographic Images and Signals. *Nature Communications.* 13 (1), 1-12
- [j43] Khera R*, Mortazavi B*, Sangha V, Warner F, Young HP, Ross J, Shah N, Theel E, Jenkinson W, Knepper C, Wang K, Peaper D, Martinello R, Brandt C, Lin Z, Ko A, Krumholz H, Pollock B, Schulz W (2022) A multicenter Evaluation of Computable Phenotyping Approaches for SARS-CoV-2 Infection and COVID-19 Hospitalizations. *NPJ Digital Medicine*. 5 (1), 1-9 (* equal contribution first author)
- [j42] Das A, Mortazavi B, Sajjadi S, Chaspari T, Ruebush L, Deutz N, Cote G, Gutierrez-Osuna R (2021) Predicting the macronutrient composition of mixed meals from dietary biomarkers in blood. *IEEE Journal of Biomedical and Health Informatics (J-BHI).* 26 (6), 2726-2736
- [j41] Ash G, Stults-Kolehmainen M, Busa M, Gaffey A, Angeloudis K, Muniz-Pardos B, Gregory R, Huggins R, Redeker N, Weinzimer S, Grieco L, Lyden K, Megally E, Vogiatzis I, Scher L, Zhu X, Baker J, Brandt C, Businelle M, Fucito L, Griggs S, Jarrin R, Mortazavi B, Prioleau T, Roberts W, Spanakis E, Nally L, Debruyne A, Bachl N, Pigozzi F, Halabchi F, Ramagole D, Janse van Rensburg D, Wolfarth B, Fossati C, Rozenstoka S, Tanisawa K, Börjesson M, Casajus J, Gonzalez-Aguero A, Zelenkova I, Swart J, Gursoy G, Meyerson W, Liu J, Greenbaum D, Pitsiladis Y, Gerstein M (2021) Establishing a Global Standard for Wearable Devices in Sport and Exercise Medicine: Perspectives from Academic and Industry Stakeholders. *Sports Medicine*. 51 (11), 2237-2250
- [j40] Huang C, Li SX, Caraballo C, Masoudi F, Rumsfeld J, Spertus J, Normand S, Mortazavi B, Krumholz H (2021) Performance Metrics for the Comparative Analysis of Clinical Risk Prediction Models Employing Machine Learning. *Circulation: Cardiovascular Quality and Outcomes (CIRCOUTCOMES)*. 14 (10), e007526
- [j39] Khera R, Mortazavi B, Krumholz H (2021) Assessing Performance of Machine Learning Reply. *JAMA Cardiology*. 6 (12), 1466-1466
- [j38] Mortazavi B, Gutierrez-Osuna R (2021) A Review of Digital Innovations for Diet Monitoring and Precision Nutrition. *Journal of Diabetes Science and Technology*. 19322968211041356
- [j37] Hagve M, Simbo SY, Ruebush LE, Engelen MP, Gutierrez-Osuna R, Mortazavi B, Cote G, Deutz NE (2021) Postprandial Concentration of Circulating Branched Chain Amino Acids are Able to Predict the Carbohydrate Content of the Ingested Mixed Meal. *Clinical Nutrition*. 40 (8), 5020-5029
- [j36] Mori M, Durant T, Huang C, Mortazavi B, Coppi A, Jean R, Geirsson A, Schulz W, Krumholz H (2021) Toward Dynamic Risk Prediction of Outcomes After Coronary Artery Bypass Graft: Improving Risk Prediction with Intraoperative Events Using Gradient Boosting. *Circulation: Cardiovascular Quality and Outcomes (CIRCOUTCOMES)*. 120.007363
- [j35] McPadden J, Warner F, Young HP, Hurley NC, Pulk R, Sing A, Durant T, Gong G, Desai N, Haimovich A, Taylor RA, Gunel M, Dela Cruz C, Farhadian S, Siner J, Villanueva M, Churchwell K, Hsiao A, Torre Jr C, Velazquez E, Herbst R, Iwasaki A, Ko A, Mortazavi B, Krumholz H, Schulz W (2021) Clinical Characteristics and Outcomes for 7,995 Patients with SARS-CoV-2 Infection. *PlosONE*. 16 (3), e0243291

- [j34] Schulz W, Young HP, Coppi A, Mortazavi B, Lin Z, Jean R, Krumholz H (2021) Temporal Relationship of Computer and Structured Diagnoses in Electronic Health Record Data. *BMC Medical Informatics and Decision Making*. 21 (1), 1-9
- [j33] Markert C, Sasangohar F, Mortazavi B, Fields S (2021) The Use of Telehealth Technology to Support Health Coaching for Older Adults: Literature Review. *JMIR Human Factors*. 8 (1), e23796
- [j32] Dhruva S, Ross J, Mortazavi B, Hurley N, Krumholz H, Curtis J, Berkowitz A, Masoudi F, Messenger J, Parzynski C, Ngufor C, Girotra S, Amin A, Shah N, Desai N (2021) Use of Mechanical Circulatory Support Devices Among Patients with Acute Myocardial Infarction Complicated by Cardiogenic Shock. *JAMA Network Open.* 4(2), e2037748
- [j31] Khera R, Haimovich J, Hurley N, McNamara R, Spertus J, Desai N, Rumsfeld J, Masoudi F, Huang C, Normand S-L, Mortazavi B, Krumholz H (2021) Use of Machine Learning Models to Predict Mortality Following Acute Myocardial Infarction. *JAMA Cardiology*. 6 (6), 633-641
- [j30] Hurley N, Spatz E, Krumholz H, Jafari R, Mortazavi B (2020) A Survey of Challenges and Opportunities in Sensing and Analytics for Risk Factors of Cardiovascular Disorders. *ACM Transactions on Computing for Healthcare (ACM Health)*. 2(1), 1-42
- [j29] Mori M, Brooks C, Spatz E, Mortazavi B, Dhruva S, Linderman G, Grab L, Zhang Y, Geirsson A, Chaudhry S, Krumholz H (2020) Protocol for Project Recovery: Cardiac Surgery-Leveraging Digital Platform for Efficient Collection of Longitudinal Patient-Reported Outcome Data Towards Improving Postoperative Recovery. *BMJ Open.* 10 (9), e036959
- [j28] Dhruva S, Mortazavi B, Desai N (2020) Intravascular Microaxial Left Ventricular Assist Device vs. Intra-aortic Balloon Pump for Cardiogenic Shock Reply. *Journal of the American Medical Association (JAMA)*. 324 (3), 303-304
- [j27] Stevens L, Mortazavi B, Deo R, Curtis L, Kao D (2020) Recommendations for Reporting Machine Analyses in Clinical Research. *Circulation: Cardiovascular Quality and Outcomes (CIRCOUTCOMES)*. 13 (10), e006556
- [j26] Dhruva S, Ross J, Mortazavi B, Hurley N, Krumholz H, Curtis J, Berkowitz A, Masoudi F, Messenger J, Parzynski C, Ngufor C, Girotra S, Amin A, Shah N, Desai N (2020) Association of use of an intravascular microaxial left ventricular assist device vs. intra-aortic balloon pump with in-hospital mortality and major bleeding among patients with acute myocardial infarction complicated by cardiogenic shock. *Journal of the American Medical Association (JAMA)*. 323 (8), 734-745
- [j25] Akbari A, Solis R, Jafari R, Mortazavi B (2020) Using Intelligent Personal Annotations to Improve Human Activity Recognition for Movements in Natural Environments. *IEEE Journal of Biomedical and Health Informatics (J-BHI).* 24 (9), 2639-2650
- [j24] Annapureddy A, Angraal S, Caraballo-Cordovez C, Grimshaw A, Huang C, Mortazavi B, Krumholz H (2019) Federal Funding for Clinical Research Applying Machine Learning Techniques in 2017: An Analysis of the NIH RePORTER. *NPJ Digital Medicine*. 3 (1), 1-4
- [j23] Huang C, Li SX, Mahajan S, Testani J, Wilson F, Mena C, Masoudi F, Rumsfeld J, Spertus J, Mortazavi B, Krumholz H (2019) Development and Validation of a Model for Predicting the Risk of Acute Kidny Injury Associated with Contrast Volume Levels During Percutaneous Coronary Intervention. *JAMA Network Open.* 2(11): e1916021-e1916021
- [j22] Hurley N, Haimovich A, Taylor RA, Mortazavi B (2019) Visualization of Emergency Department Clinical Data for Interpretable Patient Phenotyping. Elsevier Smart Health. (Special Issue: Proceedings of the ACM/IEEE Conference on Connected Health: Applications, Systems and Engineering Technologies [c29 below]). 2022 100285

- [j21] Angraal S*, Mortazavi B*, Gupta A, Khera R, Ahmad T, Desai N, Jacoby D, Masoudi F, Spertus J, Krumholz H (2019) Predicting Mortality and Hospitalization in Patients with Heart Failure with Preserved Ejection Fraction. *JACC Heart Failure*. 8 (1), 12-21 (+ equal contribution first authors)
- [j20] Mortazavi B, Bucholz E, Desai N, Huang C, Curtis J, Masoudi F, Shaw R, Negahban S, Krumholz H (2019) Comparison of Machine Learning Methods with National Cardiovascular Data Registry Models for Prediction of Risk of Bleeding After Percutaneous Coronary Intervention. *JAMA Network Open.* 2 (7), e196835-e196835
- [j19] Spatz E, Martinez-Brockman J, Tessier-Sherman B, Mortazavi B, Roy B, Schwartz J, Nazario C, Maharaj R, Nunez M, Adams OP, Burg M, Nunez-Smith M (2019) Phenotypes of hypertensive ambulatory blood pressure patterns: Design and rationale of the ECHORN Hypertension Study. *Ethnicity and Disease*. 29 (4), 535-544
- [j18] Huang C, Murugiah K, Mahajan S, Li SX, Dhruva S, Haimovich J, Wang Y, Schulz W, Testani J, Wilson F, Mena C, Masoudi F, Rumsfeld J, Spertus J, Mortazavi B*, Krumholz H* (2018) Enhancing the Prediction of Acute Kidney Injury Risk after Percutaneous Coronary Intervention using Machine Learning Techniques: A retrospective cohort study. *Plos Medicine*. 15 (11), e1002703 (* equal contribution senior author)
- [j17] Nathan V, Paul S, Prioleau T, Niu L, Mortazavi B, Cambone S, Veeraraghavan A, Sabharwal A, Jafari R (2018) A Survey on Smart Homes for Aging in Place: Toward Solutions to the Specific Needs of the Elderly. *IEEE Signal Processing Magazine*. 35 (5), 111-119
- [j16] Mortazavi B, Desai N, Zhang J, Coppi A, Warner F, Krumholz H, Negahban S (2017) Prediction of Adverse Events in Patients Undergoing Major Cardiovascular Procedures. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. 21 (6), 1719-1729
- [j15] Kalantarian H, Mortazavi B, Pourhomayoun M, Alshurafa N, Sarrafzadeh M (2016) Probabilistic Segmentation of Time-Series Audio Signals using Support Vector Machines. *Microprocessors and Microsystems*. 46, 96-104
- [j14] Kalantarian H, Sideris C, Mortazavi B, Alshurafa N, Sarrafzadeh M (2016) Dynamic Computation Offloading of Low Power Wearable Health Monitoring Systems. *IEEE Transactions on Biomedical Engineering (TBME)*. 64 (3), 621-628
- [j13] Mortazavi B, Downing N, Bucholz E, Dharmarajan K, Manhapra A, Li SX, Negahban S, Krumholz H (2015) Analysis of Machine Learning Techniques for Heart Failure Readmissions. *Circulation: Cardiovascular Quality and Outcomes (CIRCOUTCOMES)*. 9 (6), 629-640
- [j12] Hunter D, Torkelson J, Bodnar J, Mortazavi B, Laurent T, Deason J, Thephavongsa K, Zhong J (2015) The Rickettsia Endosymbiont of Ixodes Pacificus Contains All Genes of De Novo Folate Biosynthesis. *PLOSOne* 10. (12) e0144552
- [j11] Mortazavi B, Pourhomayoun M, Nyamathi S, Wu B, Lee SI, Sarrafzadeh M (2015) User-optimized Activity Recognition for Exergaming. *Elsevier Journal of Pervasive and Mobile Computing*. 26, 3-16
- [j10] Lee SI, Park E, Huang A, Mortazavi B, Garst JH, Jahanforouz N, Espinal M, Siero T, Pollack S, Afridi M, Daneshvar M, Ghias S, Lu DC, Sarrafzadeh M (2015) Objectively Quantifying Walking Ability in Degenerative Spinal Disorder Patients using Sensor Equipped Smart Shoes. *Medical Engineering & Physics (Med Eng Phys)*. 38 (5), 442-449
- [j9] Lee SI, Li C, Hoffman H, Lu D, Getachew R, Mortazavi B, Garst J, Espinal M, Razaghy M, Ghalehsari N, Paak B, Chavam A, Afridi M, Ostowari A, Ghasemzadeh H, Lu D, Sarrafzadeh M (2014) Quantitative Assessment of Hand Motor Function in Cervical Spinal Disorder Patients Using Target Tracking Tests. *Journal of Rehabilitation Research and Development (J-RRD)*. 53 (6)
- [j8] Kalantarian H, Mortazavi B, Alshurafa N, Sideris C, Le T, Sarrafzadeh M (2016) A Comparison of Piezoelectric-Based Inertial Sensing and Audio-Based Detection of Swallows. *Elsevier Journal of Obesity*. 1, 6-14

- [j7] Mortazavi B, Nemati E, VanderWall K, Flores-Rodriguez H, Cai J, Lucier J, Naeim A, Sarrafzadeh M (2015) Can Smartwatches Replace Smartphones for Posture Tracking? *Sensors*. 15 (10), 26783-26800
- [j6] Woodbridge J, Mortazavi B, Bui AAT, Sarrafzadeh M (2014) Improving Biomedical Signal Search Results in Big Data Case-Based Reasoning Environments. *Elsevier Journal of Pervasive and Mobile Computing*. 28, 69-80
- [j5] Lee SI, Mortazavi B, Hoffman H, Lu D, Paak B, Garst J, Razaghy M, Lu D, Sarrafzadeh M (2014) A Prediction Model for Functional Outcomes in Spinal Cord Injured Patients Using Gaussian Process Regression. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. 20 (1), 91-99
- [j4] Mortazavi B, Pourhomayoun M, Ghasemzadeh H, Jafari R, Roberts C, Sarrafzadeh M (2014) Context-Aware Data Processing to Enhance Quality Measurements in Wireless Health Systems: An Application to MET Calculation of Exergaming Actions. *IEEE Internet of Things Journal (J-IOT)*. 2 (1), 84-93
- [j3] Alshurafa N, Xu W, Liu J, Huang MC, Mortazavi B, Roberts C, Sarrafzadeh M (2013) Designing a Robust Activity Recognition Framework for Health and Exergaming using Wearable Sensors. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. 18 (5), 1636-1646
- [j2] Mortazavi B, Nyamathy S, Lee SI, Wilkerson T, Ghasemzadeh H, Sarrafzadeh M (2013) Near-Realistic Mobile Exergames with Wireless Wearable Sensors. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. 18 (2), 449-456 (*Featured Article March, 2014*)
- [j1] Lee SI, Ghasemzadeh H, Mortazavi B, Sarrafzadeh M (2012) Pervasive Assessment of Motor Function: A Lightweight Grip Strength Tracking System. *IEEE Journal of Biomedical and Health Informatics (J-BHI)*. 17 (6), 1023-1030

Peer-Reviewed Conferences

- [c64] King R, Krueger C, Veselka E, Yang T, Mortazavi B (2024) A Domain Incremental Continual Learning Benchmark for ICU Time Series Model Transportability. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 24) (Acceptance Rate: 25.8%)
- [c63] King R, Kodali S, Krueger C, Yang T, Mortazavi B (2024) An Efficient Contrastive Unimodal Pretraining Method for EHR Time Series Data. *IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI 24) (Acceptance Rate: 25.8%)*
- [c62] Nowroozilarki Z, Huang S, Khera R, Mortazavi B (2024) Non-Invasive Electrolyte Estimation Using Multi-Lead ECG Data via Semi-Supervised Contrastive Learning with an Adaptive Loss. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 24) (Acceptance Rate: 25.8%)
- [c61] Das A, Do E, Glantz N, Bevier W, Santiago R, Kerr D, Mortazavi BJ, Gutierrez-Osuna R (2024) Macronutrient constraints and priors improve carbohydrate predictions from continuous glucose monitors. *IEEE Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN '24)*.
- [c60] Nowroozilarki Z, Huang S, Khera R, Mortazavi BJ (2024) ECG Abnormality Detection in MIMIC-IV-ECG Data Using Supervised Contrastive Learning. 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (**EMBC**)
- [c59] King R, Yang T*, Mortazavi B* (2023) Multimodal Pretraining of Medical Time Series and Notes. Proceedings of the *Machine Learning for Health (ML4H) Symposium*. *Equal Contribution Senior Author
- [c58] Pakbin A, Nowroozilarki Z, Lee DKK, Mortazavi B (2023) Predicting Real-Time, Recurrent Adverse Invasive Ventilation from Clinical Data Streams. *IEEE Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN '23)*. (Oral Talk Acceptance Rate 21.6%)

- [c57] Do E, Lavu S, Kum HC, Mortazavi B (2023) Earlier Identification of Hypertensive Events in a Telemonitoring System. *IEEE Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN '23)*.
- [c56] Do E, Das A, Glantz N, Bevier W, Santiago R, Kerr D, Gutierrez-Osuna R, Mortazavi B (2023) Modeling the effect of non-exercise activity thermogenesis on peak post-prandial glucose. *IEEE Conference on Body Sensor Networks:* Sensors and Systems for Digital Health (BSN '23).
- [c55] Zhang L, Huang S, Das A, Do E, Glantz N, Bevier W, Santiago R, Kerr D, Gutierrez-Osuna R, Mortazavi B (2023) Joint Embedding of Food Photographs and Blood Glucose for Improved Calorie Estimation. *IEEE Conference on Biomedical and Health Informatics (BHI 23) (Acceptance Rate: 23.6%)*
- [c54] Huang S, Jafari R, Mortazavi B (2023) ArterialNet: Arterial Blood Pressure Reconstruction. *IEEE Conference on Biomedical and Health Informatics (BHI 23) (Acceptance Rate: 23.6%)*
- [c53] Zhang L, Mortazavi B (2023) Semi-Supervised Meta-Learning for Multi-Source Heterogeneity in Time-Series Data. *Machine Learning for Healthcare* (*MLHC* 2023) (in press)
- [c52] Zhang L, Khera R, Mortazavi B (2023) Clinical Risk Prediction Models with Meta-Learning Prototypes of Patient Heterogeneity. 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (**EMBC**) (in press)
- [c51] Arefeen A, Jaribi N, Mortazavi B, Ghasemzadeh H (2022) Computational Framework for Sequential Diet Recommendation: Integrating Linear Optimization and Clinical Domain Knowledge. *Proceedings of the IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies* (**CHASE**)
- [c50] Omidvar S, Roghanizad A, Chikwetu L, Ash G, Dunn J, Mortazavi B (2022) Enhancing Continuous Glucose Monitoring-based Eating Detection with Wearable Biomarkers. *IEEE Conference on Biomedical and Health Informatics* (*BHI* 22) (Acceptance Rate: 31.3%, Oral Acceptance Rate: 11.7%)
- [c49] Huo Z, Qian X, Huang S, Wang Z, Mortazavi B (2022) Density-Aware Personalized Training for Risk Prediction in Imbalanced Medical Data. *Machine Learning for Healthcare* (*MLHC* 2022) (Acceptance Rate: 31.7%)
- [c48] Das A, Mortazavi B, Deutz N, Gutierrez-Osuna R (2022) Modeling Individual Differences in Food Metabolism through Alternating Least Squares. 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) (pp. 2988-2992)
- [c47] Ardywibowo R, Huo Z, Wang Z, Mortazavi B, Huang S, Qian X (2022) VariGrow: Variational Architecture Growing for Task-Agnostic Continual Learning based on Bayesian Novelty. *International Conference on Machine Learning* (*ICML*) (Acceptance Rate: 21.9%)
- [c46] Huo Z, Ji T, Liang Y, Huang S, Wang Z, Qian X, Mortazavi B (2022) Dynlmp: Dynamic Imputation for Wearable Sensing Data Through Sensory and Temporal Relatedness. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2022)*
- [c45] Ardywibowo R, Boluki S, Wang Z, Mortazavi B, Huang S, Qian X (2022) VDFS: Variational Foresight Dynamic Selection in Bayesian Neural Networks for Efficient Human Activity Recognition. *Proceedings of the 25th International Conference on Artificial Intelligence and Statistics* (*AlStats 2022*) (*Acceptance Rate: 29%*)
- [c44] Hurley N, Berkowitz A, Masoudi F, Ross J, Desai N, Shah N, Dhruva S, Mortazavi B (2021) Outcomes-Driven Clinical Phenotyping in Cardiogenic Shock using a Mixture of Experts. *IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI 21)* (Acceptance Rate: 32.7%)

- [c43] Huo Z, Zhang L, Khera R, Huang S, Qian X, Wang Z, Mortazavi B (2021) Sparse Gated Mixture-of-Experts to Separate and Interpret Patient Heterogeneity in EHR Data. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 21) (Acceptance Rate: 32.7%)
- [c42] Zhang L, Chen X, Chen T, Wang Z, Mortazavi B (2021) DynEHR: Dynamic Adaptation of Models with Data Heterogeneity in Electronic Health Records. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 21) (Acceptance Rate: 32.7%)
- [c41] Nowroozilarki Z, Pakbin A, Royalty J, Lee DKK, Mortazavi B (2021) Real-time Mortality Prediction Using MIMIC-IV ICU Data via Boosted Nonparametric Hazards. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 21) (Acceptance Rate: 32.7%)
- [c40] Yang M, Paromita P, Chaspari T, Das A, Sajjadi S, Mortazavi B, Gutierrez-Osuna R (2021) A Metric Learning Approach for Personalized Meal Macronutrient Estimation from Postprandial Glucose Response Signals. *IEEE-EMBS International Conference on Biomedical and Health Informatics* (*BHI* 21) (Acceptance Rate: 32.7%)
- [c39] Jian Z, Chen T, Mortazavi B, Wang Z (2021) Self-Damaging Contrastive Learning. *International Conference on Machine Learning (ICML)* (Acceptance Rate: 21.5%)
- [c38] Sajjadi S, Das A, Gutierrez-Osuna R, Chaspari T, Paromita P, Ruebush L, Deutz N, Mortazavi B (2021) Towards the Development of Subject-Independent Inverse Metabolic Models. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2021)*
- [c37] Das A, Sajjadi S, Mortazavi B, Chaspari T, Paromita P, Ruebush L, Deutz N, Gutierrez-Osuna R (2021) A Sparse Coding Approach to Automatic Diet Monitoring with Continuous Glucose Monitors. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2021)*
- [c36] Shakur A, Qian X, Wang Z, Mortazavi B, Huang S (2020) GPSRL: Learning Semi-Parametric Bayesian Survival Rule Lists from Heterogeneous Patient Data. *International Conference on Pattern Recognition (ICPR 2020)*
- [c35] Lovelace J, Mortazavi B (2020) Learning to Generate Clinically Coherent Chest X-Ray Reports. *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing: Findings 2020.* 1235-1243.
- [c34] Zhang L, Hurley N, Ibrahim B, Spatz E, Krumholz H, Jafari R, Mortazavi B, (2020) Developing Personalized Models of Blood Pressure Estimation with Wearable Sensors Using Minimally-Trained Domain Adversarial Neural Networks. *Machine Learning for Healthcare* (**MLHC** 2020) (Acceptance Rate: 35%)
- [c33] Lovelace J, Hurley N, Haimovich A, Mortazavi B, (2020) Dynamically Extracting Outcome-Specific Problem Lists from Clinical Notes with Guided Multi-Headed Attention. *Machine Learning for Healthcare* (**MLHC** 2020) (Acceptance Rate: 35%)
- [c32] Wang X, Pakbin A, Mortazavi B, Zhao H, Lee DKK (2020) BoXHED: Boosted eXact Hazard Estimator with Dynamic covariates. *International Conference on Machine Learning (ICML)* (Acceptance Rate: 27%)
- [c31] Dutta E, Bothra A, Chaspari T, Ioerger T, Mortazavi B (2020) Reinforcement Learning using EEG signals for Therapeutic Use of Music in Emotion Management. *Proceedings of the 42nd International Conference of the IEEE Engineering and Medicine in Biology Society (EMBC 2020)*
- [c30] Huo Z, Pakbin A, Chen X, Hurley N, Yuan Y, Qian X, Wang Z, Huang S, Mortazavi B (2020) Uncertainty Quantification for Deep Context-Aware Mobile Activity Recognition and Unknown Context Discovery. *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics (AlStats)* (Acceptance Rate: 29%).
- [c29] Hurley N, Haimovich A, Taylor RA, Mortazavi B (2019) Visualization of Emergency Department Clinical Data for

- Interpretable Patient Phenotyping. *Proceedings of the ACM/IEEE Conference on Connected Health: Applications, Systems and Engineering Technologies [j22 above] CHASE)* (53% acceptance rate)
- [c28] Huo Z, Sundararajhan H, Hurley N, Haimovich A, Taylor RA, Mortazavi B (2019) Sparse Embedding for Interpretable Hospital Admission Prediction. *In Proceedings of the 41st International Conference of the IEEE Engineering and Medicine in Biology Society (EMBC 2019)*
- [c27] Huo Z, Mortazavi B, Chaspari T, Deutz N, Reubush L, Gutierrez-Osuna R (2019) Predicting the meal macronutrient composition from continuous glucose monitors. *In Proceedings of the IEEE Conference on Biomedical and Health Informatics* (**BHI** '19) (Acceptance Rate: 31%, Oral Paper Acceptance Rate: 11%)
- [c26] Solis R, Pakbin A, Akbari A, Mortazavi B, Jafari R (2019) A Human-centered Wearable Sensing Platform with Intelligent Automated Data Annotation Capabilities. *ACM/IEEE Conference on Internet of Things Design and Implementation (IoTDI)* (Acceptance Rate: 35%)
- [c25] Akbari A, Liu P, Mortazavi B, Jafari R (2019) Tagging Wearable Accelerometers in Camera Frames through Information Translation between Vision Sensors and Accelerometers. *International Conference on Cyber Physical Systems (ICCPS)* (Acceptance Rate: 22%)
- [c24] Ardiwibowo R, Zhao G, Wang Z, Mortazavi B, Huang S, Qian X (2019) Adaptive Activity Monitoring with Uncertainty Quantification in Switching Gaussian Process Models. *Proceedings of the 22nd International Conference on Artificial Intelligence and Statistics (AIStats)* (Acceptance Rate: 32%)
- [c23] Kalatzis A, Mortazavi B, Pourhomayoun M (2018) Interactive Dimensionality Reduction for Improving Patient Adherence in Remote Health Monitoring. In *Proceedings of the 2018 International Conference on Computational Science and Computational Intelligence (CSCI)*
- [c22] Pakbin A, Rafi P, Hurley N, Schulz W, Krumholz H, Mortazavi B (2018) Prediction of ICU Readmissions Using Data at Patient Discharge. In *Proceedings of the 40th International Conference of the IEEE Engineering and Medicine in Biology Society (EMBC)*
- [c21] Hezarjaribi N, Dutta R, Xing T, Murdoch G, Mazrouee S, Mortazavi B, Ghassemzadeh H (2018) Monitoring Lung Mechanics during Mechanical Ventilation using Machine Learning Algorithms. In *Proceedings of the 40th International Conference of the IEEE Engineering and Medicine in Biology Society (EMBC)*
- [c20] Goel N, Chaspari T, Mortazavi B, Prioleau T, Sabharwal A, Gutierrez-Osuna R (2018) Knowledge-Driven Dictionaries for Sparse Representation of Continuous Glucose Monitoring Signals. In *Proceedings of the 40th International Conference of the IEEE Engineering and Medicine in Biology Society (EMBC)*
- [c19] Pourhomayoun M, Nemati E, Mortazavi B, Sarrafzadeh M (2015) Context-Aware Analytics for Activity Recognition. In *Proceedings of the Fourth International Conference on Data Analytics (Data Analytics 2015)* (Best Paper Award)
- [c18] Alinia P, Saeedi R, Mortazavi B, Ghasemzadeh H (2015) Impact of Sensor Misplacement on Estimating Metabolic Equivalent of Task with Wearables. In *Proceedings of the 12th IEEE Conference on Wearable and Implantable Body Sensor Networks (BSN 2015)*
- [c17] Mortazavi B, Pourhomayou M, Nyamathi S, Wu B, Lee SI, Sarrafzadeh M (2014) Multiple Model Recognition for Near-Realistic Exergaming. In *Proceedings of the 2015 IEEE Interantional Conference on Pervasive Computing and Communication (PerCom)* (14% Acceptance Rate)

- [c16] Mortazavi B, Pourhomayoun M, Alshurafa N, Chronley M, Lee SI, Roberts CK, Sarrafzadeh M (2014) Support Vector Regression for Estimating the Metabolic Equivalent of Task of Exergaming Actions. *In Proceedings the Conference on Healthcare Innovations and Point-of-Care Technologies.* (IEEE EMBS HIPT)
- [c15] Pourhomayoun M, Alshurafa N, Mortazavi B, Ghasemzadeh H, Sarrafzadeh M (2014) Multiple Model Analytics for Adverse Event Prediction in Remote Health Monitoring Systems. *In Proceedings of the Conference on Healthcare Innovations and Point-of-Care Technologies.* (IEEE EMBS HIPT)
- [c14] Mortazavi B, Lee SI, Sarrafzadeh M (2014) User-Centric Exergaming with Fine-Grain Activity Recognition: A Dynamic Optimization Approach. In *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct Publication (Ubicomp '14 Adjunct)*
- [c13] Mortazavi B, Pourhomayoun M, Alsheikh G, Alshurafa N, Lee SI, Sarrafzadeh M (2014) Determining the Single Best Axis for Exercise Repetition Recognition and Counting in SmartWatches. In *Proceedings of the 11th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2014)*
- [c12] Alshurafa N, Pourhomayoun M, Nyamathi S, Bao L, Mortazavi B, Eastwood J, Sarrafzadeh M (2014) Anti-Cheating: Detecting Self-Inflicted and Impersonator Cheaters for Remote Health Monitoring Systems with Wearable Sensors. In Proceedings of the 11th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2014)
- [c11] Lee SI, Ghasemzadeh H, Mortazavi B, Lan M, Ong M, Sarrafzadeh M (2013) Remote Monitoring Systems: What Impact Can Data Analytics Have on Cost? *In Proceedings of Wireless Health 2013*
- [c10] Mortazavi B, Alsharufa N, Lee SI, Lan M, Chronley M, Roberts CK, Sarrafzadeh M (2013) MET Calculations from On-Body Accelerometers for Exergaming Movements. In *Proceedings of the 10th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2013)*
- [c9] Moazeni M, Mortazavi B, Sarrafzadeh M (2013) High Performance Multi-Dimensional Signal Search with Applications in Remote Medical Monitoring. In *Proceedings of the 10th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2013)*
- [c8] Alsharufa N, Xu W, Liu J, Huang MC, Mortazavi B, Roberts CK, Sarrafzadeh M (2013) Robust Human Intensity-Varying Activity Recognition using Stochastic Approximation in Wearable Sensors. In *Proceedings of the 10th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2013)*
- [c7] Lee SI, Ghasemzadeh H, Mortazavi B, Yew A, Getachew R, Razaghy M, Ghalehsari N, Paak B, Garst J, Espinal M, Kimball J, Lu D, Sarrafzadeh M (2013) Objective Assessment of Overexcited Hand Movements Using a Lightweight Sensory Device. In *Proceedings of the 10th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN 2013)*
- [c6] Woodbridge J, Mortazavi B, Sarrafzadeh M, Bui AAT (2012) A Monte Carlo Approach to Biomedical Time Series Search. (2012) In *Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine* (*BIBM* 2012)
- [c5] Woodbridge J, Mortazavi B, Bui, AAT, Sarrafzadeh M (2012) Aggregated Indexing of Biomedical Time-Series Data. In *Proceedings of the 2nd IEEE Conference on Healthcare Informatics, Imaging, and Systems Biology (HISB 2012)*
- [c4] Suh DMK, Woodbridge J, Moin T, Lan M, Alshurafa N, Samy L, Mortazavi B, Ghasemzadeh H, Bui AAT, Ahmadi S, Sarrafzadeh M (2012) Dynamic Task Optimization in Remote Diabetes Monitoring Systems. In *Proceedings of the 2nd IEEE Conference on Healthcare Informatics, Imaging, and Systems Biology (HISB 2012)*
- [c3] Woodbridge J, Mortazavi B, Sarrafzadeh M (2012) High Performance Biomedical Time-Series Indexing Using Salient Segmentation. In *Proceedings of the 34th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC '12)*

- [c2] Mortazavi B, Chu, KC, Li X, Tai J, Kotekar S, Sarrafzadeh M (2012) Near-Realistic Motion Video Games with Enforced Activity. 9th International Conference on Wearable and Implantable Body Sensor Networks (**BSN** 2012)
- [c1] Mortazavi B, Hagopian H, Woodbridge J, Yadegar B, Sarrafzadeh M (2011) A Wireless Body-Wearable Sensor System of Designing Phyiscally Interactive Video Games. *Proceedings of the International Conference on Biomedical Electronics and Devices (BIODEVICES 2011)*

Abstracts/Workshops/Posters/Demos

- [a23] Sangha V, Oikonomou E, Khunte A, Gupta K, Mortazavi B, Khera R (2023) Smart-AS: A Novel Artificial Intelligence Tool to Detect Severe Aortic Stenosis from Electrocardiographic Images. *American College of Cardiology Scientific Sessions*.
- [a22] Khunte A, Sangha V, Dhingra L, Oikonomou E, Mortazavi B, Khera R (2023) Deep Learning-Based Detection of Left Ventricular Systolic Dysfunction from Noisy Single Lead Electrocardiography Adapted for Wearable Devices. *American College of Cardiology Scientific Sessions*.
- [a21] Sangha V, Khunte A, Holste G, Mortazavi B, Wang Z, Oikonomou E, Khera R (2023) Biometric Contrastive Modeling for Data-Efficient Deep Learning from Electrocardigraphic Images. *American College of Cardiology Scientific Sessions*.
- [a20] Holste G, Oikonomou EK, Mortazavi B, Wang Z, Khera R (2022) Self-Supervised Learning of Echocardiogram Videos Enables Data-Efficient Clinical Diagnosis. 2nd Workshop on Interpretable Machine Learning in Healthcare at ICML.
- [a19] Sheppard J, Huang C, Mortazavi B, Schulz W, Krumholz H, Khera R (2022) Assessing Variation in Data Captured by Clinical Registries and the Electronic Health Record: Clinical Phenotypes of Patients Undergoing Cardiac Catheterization. *Quality of Care and Outcomes Research (AHA QCOR)*
- [a18] Abou Ziki M, Annapureddy A, Hurley N, Mahajan S, Murugiah K, Huang C, Caraballo C, Khera R, Ranasinghe I, Curtis J, Rumsfeld J, Masoudi F, Mortazavi B, Krumholz H (2022) Machine Learning Based One-Year Mortality Prediction in Patients Undergoing Primary Prevention Cardioverter Defibrillator Implantation: A Retrospective Cohort Study. *Heart Rhythm*, 316-317.
- [a17] Liang C, Mortazavi B (2022) Evaluating Short Animation Videos in Asynchronous Teaching. SIGCSE'22: Proceedings of the 53rd ACM Technical Symposium on Computer Science Education.
- [a16] Huang C, Murugiah K, Annapureddy A, Schulz W, Masoudi F, Rumsfeld J, Mortazavi B, Krumholz, H (2021) Automating Risk Assessment of Acute Kidney Injury for Patients Undergoing Percutaneous Coronary Intervention. *Quality of Care and Outcomes Research (AHA QCOR)* Circulation 2021;144;A10210.
- [a15] Tano M, Elizondo J, Cainzos Achirica M, Javed Z, Mortazavi B, Khan S, Nasir K (2021) Non-linear Modelling of Social Determinants of Health to Predict Cardiovascular Mortality Risk. *Quality of Care and Outcomes Research (AHA QCOR)*. Circulation 2021;144:A13925
- [a14] Nowroozilarki Z, Hurley N, Mortazavi B (2021) Enhancing Human Activity Recognition by Opportunistically Selecting IoT Sensors. *IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN): Special Session: Toward Artificial General Intelligence for Wearable Systems*.
- [a13] Lee DKK, Chen N, Ishwaran H, Wang X, Pakbin A, Mortazavi B, Zhao H (2021) Theory and Software for Boosted Nonparametric Hazard Estimation. *Survival Prediction-Algorithms, Challenges and Applications. PMLR* 149-158.
- [a12] Paromita P, Chaspari T, Sajjadi S, Das A, Mortazavi B, Gutierrez-Osuna R (2021) Personalized Meal Classification using Continuous Glucose Monitors. *Joint Proceedings of the ACM IUI 2021 Workshops (HEALTHI Workshop)*

- [a11] Hurley N, Berkowitz A, Masoudi F, Ross J, Desai N, Shah N, Dhruva S, Mortazavi B (2021) Outcomes-Driven Clinical Phenotyping in Patients with Cardiogenic Shock for Risk Modeling and Comparative Treatment Effectiveness. *The ACM Conference on Health Informatics and Learning, Workshop (ACM CHIL 2021)*
- [a10] Zhang L, Chen X, Chen T, Wang Z, Mortazavi B (2021) DynEHR: Dynamic Adaptation of Models with Data Heterogeneity in Electronic Health Records. *The ACM Conference on Health Informatics and Learning, Workshop (ACM CHIL 2021)*
- [a9] Lovelace J, Hurley N, Haimovich A, Mortazavi B (2020) Mining Dynamic Problem Lists from Clinical Notes for Interpretable Prediction of Adverse Outcomes. *The ACM Conference on Health informatics and Learning, Workshop.* (ACM CHIL 2020)
- [a8] Lovelace J, Hurley N, Haimovich A, Mortazavi B (2019) Explainable Prediction of Adverse Outcomes Using Clinical Notes. *The 2019 NeurIPS Workshop on Machine Learning for Healthcare (ML4H)*
- [a7] Dhruva S, Ross J, Mortazavi B, Hurley N, Krumholz H, Curtis J, Berkowitz A, Masoudi F, Messenger J, Parzynski C, Ngufor C, Girotra S, Amin A, Shah N, Desai N (2019) Mortality and Bleeding Among Patients with Acute Myocardial Infarction Complicated by Cardiogenic Shock Undergoing Percutaneous Coronary Intervention with Impella vs. Intra-Aortic Balloon Pump. *AHA Scientific Sessions 2019*
- [a6] Pakbin A, Samareh A, Chen X, Hurley N, Yuan Y, Huang S, Qian X, Wang Z, Mortazavi B, (2019) Uncertainty Quantification for Deep Context-Aware Mobile Activity Recognition and Unknown Context Discovery. *ICML Uncertainty and Robustness Estimation in Deep Learning Workshop*
- [a5] Haimovich A, Hong W, Taylor RA, Mortazavi B, (2018) Computational Discovery and Visualization of Patient Phenotypes from Emergency Department Health Records. *Annals of Emergency Medicine* 72 (4): S130-131.
- [a4] Huo Z, Jafari R, Mortazavi B (2018) Utilizing Context Information for Ubiquitous Computation. 2018 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN '18). [Late Breaking Abstract]
- [a3] Chaspari T, Mortazavi B, Prioleau T, Sabharwal A, Gutierrez-Osuna R (2017) Sparse Representation Models of Continuous Glucose Monitoring Time-Series. 2018 IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN '18). [Late Breaking Abstract] (Runner up best poster award)
- [a2] Naeim A, VanderWall K, Lucier J, Sarrafzadeh M, Tan HJR, Mortazavi B, Nemati E (2014) Accurate Classification of Performance Status in Elderly Patients: Design, Validation, and Implementation of a Remote Patient Activity Monitoring Device. *Journal of geriatric oncology.* 2014-10;5:S48
- [a1] Mortazavi B, Sarrafzadeh M (2012) Soccer Exergaming: A Platform for Energy Expenditure Video Games. 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012) (Best Demo Award)

Patents

- [p2] (Pending) PCT/US2020/0352481A1 Gutierrez-Osuna R, Mortazavi B, Huo Z, Cote G, Deutz N. Predicting Food Macronutrients from Blood Biomarkers
- [p1] US 10,201,746 B1 Sarrafzadeh M, Mortazavi B, Li, X, Chu K. Near-Realistic Sports Motion Analysis and Activity Monitoring

INVITED TALKS

[i22] Mortazavi B. Sensing and Modeling for Personalized Cardiovascular Digital Health. Texas A&M University CESG Seminar. August 2024.

- [i21] Mortazavi B. Cardiovascular Digital Twins: From Clinical to Remote Sensing with Generative AI. Seminar for the University of Texas Center for Generative AI. April 2024.
- [i20] Mortazavi B. Using AI for Clinical Endpoints. Cardiovascular Clinical Trialists Global Forum (CVCT) December 2023.
- [i19] Hoffman U and Mortazavi B. Al for Enriching Trial Populations and Predicting Outcomes. Cardiovascular Clinical Trialists Global Forum (CVCT) December 2023.
- [i18] Mortazavi B. Modeling Cardiovascular Digital Health. UC Irvine Institute for Future Health Seminar. November 2023.
- [i17] Mortazavi B, Huang S. Towards Automatic Diet Monitoring: A Tutorial on Macronutrient Estimation with Machine Learning. Google Research Experience for Undergrads at Texas A&M Summer Tutorial. July 2023
- [i16] Mortazavi B. Macronutrient Estimation with Machine Learning. PATHS-UP Research Experience for Teachers Summer Workshop. July 2023
- [i15] Mortazavi B. Al Terms You Should Know: Communicating Between Clinicians and Engineers. NHLBI Workshop on Transforming Hypertension Diagnosis and Management in the Era of Artificial Intelligence. March 2023.
- [i14] Mortazavi B. Time-Varying, Adaptable Models for Personalized Digital Health and Clinical Outcomes. Rice ECE Seminar. March 2023.
- [i13] Mortazavi B. Time-Varying, Adaptable Models for Personalized Digital Health and Clinical Outcomes. IEEE BHI Technical Committee Educational Series. October 2022.
- [i12] Mortazavi B. Learning Personal Models for Remote Health Monitoring. IEEE EMBC 2022 Mini Symposium on Signal Processing and Machine Learning Paradigms for Enabling the Digital Health Ecosystem. July 2022.
- [i11] Mortazavi B. Generalizability and Transportability, ML Methods for Causal Inference with Observational Data, the Yale-Mayo CERSI workshop on Artificial Intelligent and Causality for the Food and Drug Administration, November 2021
- [i10] Mortazavi B. Diabetes Technology Society Virtual International Covid-19 and Diabetes Summit, Panel on Big Data Statistics, August 2020
- [i9] Mortazavi B. Personalizing Remote Health: Cuffless Blood Pressure Monitoring. Multidisciplinary Undergraduate Research Training in Wearable Computing REU 2020 Washington State University Embedded and Pervasive Systems Lab, June 2020.
- [i8] Mortazavi B. Machine Learning for Clinical Outcomes and Remote Sensing in Cardiovascular Conditions. Center for Outcomes Research, Houston Methodist, Nov. 2019, Houston, TX.
- [i7] Mortazavi B. Personalizing remote modeling for medical outcomes. Social Science Modeling for Big Data in the World of Machine Learning Workshop, National Institute of Aging (NIA)/National Academies of Sciences, Engineering, and Medicine (NASEM), Oct. 2019, Washington DC.
- [i6] Mortazavi B. Panelist: Trilateral Japan, US, and Israel Advancements in Artificial Intelligence for the Aging and Healthcare: A Dialogue with Industry and Academic Experts. Asia Society Meeting. Houston, TX.
- [i5] Mortazavi B. Towards Integration of Wearable Sensors for Clinical Outcomes Research, Yale Computational Biology & Bioinformatics Seminar, Nov. 2018, Yale University, New Haven, CT

- [i4] Mortazavi B. Remote Sensing and Outcomes Research. 2017 IBM Workshop on Computational Health, Yorktown Heights, NY.
- [i3] Mortazavi B. Challenges in Developing Methods for a Clinical Audience. 2015 Workshop on Machine Learning and Data Mining with a Focus on Human Studies at the 2015 Wireless Health Conference. NIH. Bethesda, MD.
- [i2] Mortazavi B, Sarrafzadeh M. Realistic, Real-Time Activity Detection in Sports for Exergaming. 2013 Workshop on Pervasive Sensing in Sports and Extreme Environments at 2013 IEEE Body Sensor Networks Conference. Boston, MA.
- [i1] Mortazavi B, Sarrafzadeh M. Hackers Can Kill You. 2011 TakeDownCon 2011, Dallas, Tx

SERVICE

Journal Editorial Board

- Associate Editor, Journal of the American College of Cardiology (JACC) (2024--)
- Associate Editor, IEEE Journal of Biomedical and Health Informatics (IEEE J-BHI) (2024--)
- Associate Editor, ACM Transactions on Computing for Healthcare (ACM HEALTH) (2022--)
- Associate Statistical Editor, Circulation: Cardiovascular Quality and Outcomes (2020--2024)
- Associate Editor, Plos One (2018--2024)
- Guest Editor, MDPI Information Special Issue on Smart Health (2015)

Conference & Workshop Organization (Selected)

- Technical Program Committee Co-chair, 2024 IEEE EMBS Conference on Biomedical and Health Informatics (BHI)
- Clinical Abstracts Chair, 2024 IEEE EMBS International Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN 2024)
- Theme Editor, 2024 IEEE Engineering in Medicine and Biology Conference (EMBC).
- Senior Area Chair, 2024 AHLI Conference on Health Inference and Learning (CHIL)
- Workshop Co-chair, Wearable Systems for Precision Metabolic Health (Tutorial), Workshop at 2023 IEEE
 EMBS International Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN 2023)
- Workshop Co-chair, Unraveling Challenges in Time Series Analysis with Open Source Tools for Digital Health Applications, Workshop at 2023 IEEE EMBS International Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN 2023)
- Clinical Abstracts Chair, 2023 IEEE EMBS International Conference on Body Sensor Networks: Sensors and Systems for Digital Health (BSN 2023)
- Special Session Chair, 2023 IEEE EMBS International Conference on Biomedical and Health Informatics (BHI 2023)
- Proceedings Chair, 2023 AHLI Conference on Health Inference and Learning (CHIL)
- Co-organizer IEEE EMBC 2022 Mini Symposium on Signal Processing and Machine Learning Paradigms for Enabling the Digital Health Ecosystem (EMBC 2022)
- Track Chair (Track Lead), 2022 Conference on Health Inference and Learning (CHIL)
- Co-Chair, IEEE Data Hackathon for the IEEE Healthcare Summit (2021)
- Co-Chair, Yale-Mayo CERSI workshop on Artificial Intelligent and Causality for the Food and Drug Administration (2021)
- IEEE-BHI 2021 Special Session Chair: Al-Driven Informatics and Technologies for Cardiovascular Care using Multi-modal Data from EMRs and/or Wearables
- IEEE-BSN 2021 Special Session Chair: Body Sensor Networks for Tele-Health Monitoring and Coaching
- EMBC Associate Editor: Biomedical Sensors and Wearable Systems (2021, 2022, 2023)
- Track Chair (Track Lead), 2021 ACM Conference on Health Inference and Learning (ACM CHIL)

- Publicity Chair, 2020 IEEE International Conference on Pervasive Computing and Communications (PerCom)
- Travel Awards Chair, 2018 IEEE Conference on Wearable and Implantable Body Sensor Networks (BSN)
- Session Chair: IEEE EMBC (2018), PerHealth (2021)

Program Committee Member (Selected)

- IEEE BSN & BHI Committee Member/Reviewer (2018, 2019, 2021, 2022, 2023)
- AAAI: Program Committee Member/Reviewer (2021, 2022, 2023, 2024)
- AIStats: Reviewer (2022, 2023)
- NeurIPS: Reviewer (2023)
- ICML: Reviewer (2022)
- IEEE/ACM CHASE Committee Reviewer (2018, 2019, 2020, 2021, 2022)
- IEEE ICASSP: Reviewer (2022)
- Digital Health Conference (2014, 2015, 2016, 2017, 2018)
- EHealth Conference (2014, 2015, 2016, 2017, 2018, 2019)
- WristSense: Workshop on Sensing Systems and Applications Using Wrist Worn Smart Devices (2020,2021)
- PerHealth: Workshop on Pervasive Health Technologies (2021)
- Smart Health Workshop at Ubicomp '14 (2014)

University Service

- Chair, Department Faculty Awards Committee, Texas A&M University Department of CS&E (2024-2025)
- Member, Department of CS&E Promotion and Tenure Committee (2024--)
- Member, Faculty Senate, Texas A&M University (2023--)
- Member, Department of CS&E Advisory Committee (2018-2020, 2023-), Texas A&M University
- Member, Department Awards Committee, Texas A&M University Department of CS&E (2023--2024)
- Junior Faculty Advisory Council, College of Engineering, Texas A&M University (2018-2023) (Previously: Secretary, 2019-2020, Vice Chair, 2020-2021, Chair 2021-2022)
- Associate Director of Statistical Methods, Texas ViDaL (2019--)
- Member, Tenure Track Search Committee, Texas A&M University Department of CS&E (2022—2023, 2023--)
- Member, Engineering Honors Committee, Texas A&M University Department of CS&E (2022--2023)
- Member, Graduate Advisory Committee, Texas A&M University Department of CS&E (2022--2023)
- Member, CS&E Department Committee on an MS in Al Program, Texas A&M University Department of CS&E (2021--2022)
- Member, PhD Admissions Committee, Texas A&M University Department of CS&E (2017--2020)
- Member, Peer-Teaching Committee, Texas A&M University Department of CS&E (2020--2021)
- Member, EnMed Faculty Search Committee, Texas A&M University (2020)

Grant Panels

- National Science Foundation (2016, 2018, 2019, 2020, 2021, 2024)
- NASA TRISH (2018, 2024)
- NIH SBIR (2020, 2020, 2021, 2021, 2021, 2021), R21/R01 Panel (2021, 2022, 2023, 2023, 2024), P01 (2024)
- DARPA/DOD (2020, 2022, 2022)
- UK Research and Innovation (2021)
- FNR Luxembourg National Research Fund BRIDGES Program (2021)

Memberships in Professional Organizations

Senior Member, Institute for Electrical and Electronics Engineers (IEEE)

- Affiliate Member, Technical Committee on Wearable Biomedical Sensors and Systems, IEEE Engineering in Medicine and Biology Society
- Member, Technical Committee on Biomedical and Health Informatics, IEEE Engineering in Medicine and Biology Society
- Member, American Heart Association
- Life Member, Association of Computing Machinery (ACM)

Reviews (Selected)

- Clinical Journals: JAMA Network Open (2019--), Plos One (2018--), Circulation (2018--), Circulation:
 Cardiovascular Quality and Outcomes (2017--), Journal of the American College of Cardiology:
 Cardiovascular Imaging (2018--), Journal of the American College of Cardiology (2017--), Journal of the
 American College of Cardiology: Imaging (2018--), Annals of Internal Medicine (2017--), Nature Scientific
 Reports (2020--), BMC Medical Informatics and Decision Making (2020--), Elsevier Preventive Medicine
 (2019--), Elsevier Smart Health (2020--), Hypertension (2019--), Journal of Clinical and Translational
 Science (2020--), Nature Communications (2021--), Jama Network Open (2021--),
- Technical Journals: IEEE Journal of Biomedical and Health Informatics (2014--), IEEE Sensors (2014--), IEEE Internet of Things (2015--), IEEE Transactions on Learning Technology (2015--), IEEE Selected Topics in Signal Processing (2015--), IEEE Transactions on Neural Systems & Rehabilitation Engineering (2016--), Access (2017--), ACM HEALTH (2020--), JHIR (2017--), JMIR (2018--), IEEE Transactions on Mobile Computing (2020--), IEEE OJEMB (2020--)

ADVISING

Ph.D. Students

- Zhale Nowroozilarki (Fall 2020 Present)
- Ryan King (Fall 2021 Present)
- Sicong Huang (Fall 2021 Present)
- Yichen Tao (Fall 2024 Present)

Ph.D. Alumni

- Arash Pakbin (Fall 2020 Fall 2024) (PhD) (AMD)
- Zepeng Huo (Spring 2018 Fall 2022) (PhD) (Stanford School of Medicine, PostDoc, Advisor: Nigam Shah)
- Lida Zhang (Fall 2019—Summer 2023) (PhD) (Visa, Machine Learning Engineer)
- Nate Hurley (Summer 2018 Summer 2021) (MD, PhD) (U. Wisconsin Anesthesiology, Resident)

M.S. (Thesis) Students

- Julian Beaulieu (Fall 2021 Fall 2022) (Amazon)
- Sorush Omidvar (Fall 2020 Spring 2021) (Carvana)
- Arash Pakbin (Fall 2017—Summer 2020) (PhD Program)
- Roger Solis (Spring 2018—Summer 2019) (Venafi)
- Pranoy Kovuri (Fall 2017—Summer 2019) (Google)

Undergraduate Students

- Sua Bae (Summer 2023—Present)
- Yichen Tao (Summer 2023 Present)
- Nathaniel Fernandes (Summer 2023 Present)
- Joyce Su (Spring 2023 Present)
- Aaron Su (Spring 2023 Present)
- Aryan Sheik (Spring 2023 Fall 2023)

- Nick Cheng (Fall 2022 Spring 2023) * Thesis
- Dayton Berezowski (Fall 2022 Spring 2023) * Thesis
- Tony Yang (Fall 2021—Spring 2022) * Thesis
- Yijin Fang (Fall 2021—Spring 2022)
- Ori Yonay (Fall 2021—Spring 2022)
- Sehun Joo (Fall 2021—Spring 2022) * Thesis
- Mahir Pirmohammed (Fall 2021—Fall 2021)
- Jose Rodrigruez (Fall 2021—Spring 2022)
- David Taowei Ji (Fall 2020 Spring 2022)
- Anooj Shah (Fall 2020 Spring 2021)
- Ryan King (Fall 2020 Summer 2021) * Thesis
- Naveed Khimani (Fall 2020 Spring 2022)
- Amin Hamiditabar (Spring 2019 Spring 2022)
- Trey Royalty (Spring 2019 Spring 2022) * Thesis
- Justin Lovelace (Fall 2018 Spring 2020) * Thesis
- Grace Mainka (Spring 2018—Spring 2019)
- Thad Hogan (Fall 2018 Spring 2019)

Student Thesis/Dissertation Committees (membership – completed – select)

- Jonathan Martinez (PhD) (CSCE) (Spring 2023 Defense)
- Ali Akbari (PhD) (BMEN) (Fall 2021 Defense)
- Fergany Badry (PhD) (NUEN) (Dec 2020 Defense)
- Mohammad Abdoelatef (MS) (NUEN) (Oct 2019 Defense)
- Anurag Kapale (MS) (CSCE) (Oct 2019 Defense)
- Sulki Park (PHD) (INEN) (Dec 2022 Defense)
- Praveen Venugopal (MS) (CSCE) (Summer 2020 Defense)