Stanford

Jonathan Zia

- Resident in Adult Neurology
- Affiliate, Department Funds

Publications

PUBLICATIONS

- **A Comparison of Normalization Techniques for Individual Baseline-Free Estimation of Absolute Hypovolemic Status Using a Porcine Model.** *Biosensors*
  Lambert, T. P., Chan, M., Sanchez-Perez, J. A., Nikbakht, M., Lin, D. J., Nawar, A., Bashar, S. K., Kimball, J. P., Zia, J. S., Gazi, A. H., Cestero, G. I., Corporan, D., Padala, et al
  2024; 14 (2)
- **Synthetic seismocardiogram generation using a transformer-based neural network** *JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION*
  Nikbakht, M., Gazi, A. H., Zia, J., An, S., Lin, D. J., Inan, O. T., Kamaleswaran, R.
  2023; 30 (7): 1266-1273
- **Classification of Blood Volume Decompensation State via Machine Learning Analysis of Multi-Modal Wearable-Compatible Physiological Signals.** *Sensors (Basel, Switzerland)*
  Chalumuri, Y. R., Kimball, J. P., Mousavi, A., Zia, J. S., Rolfes, C., Parreira, J. D., Inan, O. T., Hahn, J. O.
  2022; 22 (4)
- **Reducing the Impact of External Vibrations on Fiducial Point Detection in Seismocardiogram Signals** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
  Lin, D. J., Kimball, J. P., Zia, J., Ganti, V. G., Inan, O. T.
  2022; 69 (1): 176-185
- **Unifying the Estimation of Blood Volume Decompensation Status in a Porcine Mode of Relative and Absolute Hypovolemia Via Wearable Sensing** *IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS*
  Kimball, J. P., Zia, J. S., An, S., Rolfes, C., Hahn, J., Sawka, M. N., Inan, O. T.
  2021; 25 (9): 3351-3360
- **Harnessing the Manifold Structure of Cardiomechanical Signals for Physiological Monitoring During Hemorrhage** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
  Zia, J., Kimball, J., Rozell, C., Inan, O. T.
  2021; 68 (6): 1759-1767
- **Machine learning to extract muscle fascicle length changes from dynamic ultrasound images in real-time** *PLOS ONE*
  Rosa, L. G., Zia, J. S., Inan, O. T., Sawicki, G. S.
  2021; 16 (5): e0246611
- **Knee Acoustic Emissions as a Digital Biomarker of Disease Status in Juvenile Idiopathic Arthritis** *FRONTIERS IN DIGITAL HEALTH*
  Whittingslow, D. C. C., Zia, J., Gharehbaghi, S., Gergely, T., Ponder, L. A. A., Prahalad, S., Inan, O. T. T.
  2020; 2: 571839
- **Enabling the assessment of trauma-induced hemorrhage via smart wearable systems** *SCIENCE ADVANCES*
  Zia, J., Kimball, J., Rolfes, C., Hahn, J., Inan, O. T.
  2020; 6 (30): eabb1708
- **Modeling Consistent Dynamics of Cardiogenic Vibrations in Low-Dimensional Subspace** *IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS*

Zia, J., Kimball, J., Hersek, S., Inan, O. T.
2020; 24 (7): 1887-1898

- **A Unified Framework for Quality Indexing and Classification of Seismocardiogram Signals** *IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS*
  Zia, J., Kimball, J., Hersek, S., Shandhi, M., Semiz, B., Inan, O. T.
  2020; 24 (4): 1080-1092

- **Utilizing Neural Networks to Predict Freezing of Gait in Parkinson's Patients**
  Zia, J., Tadayon, A., McDaniel, T., Panchanathan, S., ACM
  ASSOC COMPUTING MACHINERY.2016: 333-334