

Research Interest

Computational Neuroscience, Machine Learning, Signal Processing, Cognitive Neuroscience.

Education

- 01/20-present **PhD, Electrical Engineering**, *University of Washington*.
08/16-05/18 **Master, Electrical and Computer Engineering**, *Carnegie Mellon University*.
11/15-04/16 **Exchange Student, Biomedical Engineering**, *Tsinghua University*.
09/22-05/16 **Bachelor, Biomedical Engineering**, *Huazhong University of Science and Technology*.

Internships

- 06/22-09/22 **Unsupervised Domain Adaptation**, *Google X*.
◦ Working on improving object detection performance when the model is trained on source data-plenty domain then applied to unseen targets domains.
06/21-09/21 **Out of Distribution Detection**, *Google X*.
◦ Detecting out of distribution scenario with application to object detection task.
10/19-12/19 **Text to Speech**, *Tencent AI Lab*.
◦ Generating wave data from text feature (Part of text to speech work).

Publications

- [1] J. Li, T. Le, and E. Shlizerman, "AL-SAR: Active learning for skeleton-based action recognition," *IEEE Trans Neural Netw Learn Syst*, 2023. [Online]. Available: doi:%2010.1109/TNNLS.2023.3297853.
- [2] J. Li, L. Scholl, T. Le, P. Rajeswaran, A. L. Orsborn, and E. Shlizerman, "AMAG: Additive, multiplicative and adaptive graph neural network for forecasting neuron activity," in *Thirty-seventh Conference on Neural Information Processing Systems*, 2023. [Online]. Available: <https://openreview.net/forum?id=7ntI4kcoqG>.
- [3] J. Li, M. Keselman, and E. Shlizerman, "Openlabcluster: Active learning based clustering and classification of animal behaviors in videos based on automatically extracted kinematic body keypoints," *BioRxiv*, pp. 2022–10, 2022.
- [4] J. Li and E. Shlizerman, "Sparse semi-supervised action recognition with active learning," *ArXiv preprint arXiv:2012.01740*, 2020.
- [5] Y. Gong, H. Wu, J. Li, N. Wang, H. Liu, and X. Tang, "Multi-granularity whole-brain segmentation based functional network analysis using resting-state fmri," *Frontiers in neuroscience*, vol. 12, p. 942, 2018.
- [6] J. Li, Y. Gong, and X. Tang, "Hierarchical subcortical sub-regional shape network analysis in alzheimer's disease," *Neuroscience*, vol. 366, pp. 70–83, 2017.
- [7] X. Tang, N. Chen, S. Zhang, J. A. Jones, B. Zhang, J. Li, P. Liu, and H. Liu, "Predicting auditory feedback control of speech production from subregional shape of subcortical structures," *Human Brain Mapping*, 2017.

Activities

Fellowship, *Irene C. Peden*, 2021, 2022.
Award, *GSFEI Top Scholar Recruitment Award*, 2020.
TA, *Teaching Assistant for Computer Vision, Advanced Linear Algebra, Digital Signal Processing*.
Admin Team, *NeuroAI Seminar*.

Skills

Programming Python, MATLAB, C++, R.
Software Tools Keras, TensorFlow, PyTorch, Numpy, Matplotlib, AWS, Git, Bash.

Courses **Category:**

- *Math courses (Linear algebra, Calculus, probability theory).*
- *Machine Learning, Deep Learning, Reinforcement Learning.*
- *Neural Signal Processing.*