Jingyuan Li

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https://christincha.github.io

Research Interest

Computational Neuroscience, Machine Learning, Signal Processing, Cognitive Neuroscience.
Speciality, data-driven model design for spatial-temporal signals.

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*.
09/12–05/16 **Bachelor, Biomedical Engineering**, *Huazhong University of Science and Technology*.

Internships

06/22-09/22 **Unsupervised Domain Adaptation**, *Google X*.
- Working on open vocabulary object detection task. With a special interest in domain adaptation.

06/21-09/21 **Out of Distribution Detection**, *Google X*.
- Proposing uncertainty metric for detecting out-of-distribution examples.

Activities Awards

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*.

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.

Skills

Programming Python, MATLAB, C^{++}, R.
Deep Learning Frameworks Keras, TensorFlow, PyTorch.
Courses **Category**:
- *Math courses (Linear algebra, Calculus, probability theory).*
- *Machine Learning, Deep Learning, Reinforcement Learning.*
- *Neural Signal Processing.*