Jingyuan Li

 GitHub HomePage Linkedin jingyli6@uw.edu

EDUCATION

University of Washington, Seattle, WA   June 2020 - Now
Ph.D Electrical and Computer Engineering

Carnegie Mellon University, Pittsburgh, PA   June 2016 - May 2018
M.S Electrical and Computer Engineering

Tsinghua University   September 2015 - March 2016
Exchange Student, Biomedical Engineering

Huazhong University of Science and Technology   September 2012 - June 2016
B.S. Biomedical Engineering

SKILLS

Professional Skills: Time series modeling, Multivariate data analysis, Dynamic system, Machine learning, Deep learning, Active learning, Computational neuroscience
Languages: Python (Professional), MATLAB, C^{++}, R.
Deep Learning Frameworks: Pytorch (Professional), Keras, TensorFlow.
Packages & Tools: wxPython, Streamlit, GitHub

EXPERIENCE

Google X, Mineral | *AI Resident Intern*   Jun 2022 – September 2022
Developed models for object detection with multi-modality training, solving open vocabulary object detection under distribution shift.

Google X, Mineral | *AI Resident Intern*   June 2021 – September 2021
Proposed an uncertainty measure, which describes if a model is reliable under tasks such that it can automatically detect the risk when a model fails a task without human supervision.

Carnegie Mellon University | *Research Assistant,*   May 2018 – May 2019
Computational Modeling of Visual System. Studied the transformation of neural representation space underlying the connection modifications in V2 neurons. Demonstrated strengthened connection for co-activated neurons.

ACTIVITIES & AWARDS

Award: Pacific Cascade Chapter of the Society for Neuroscience Student Travel Award, 2024.
Award: Graduate Student Conference Presentation Award, 2023.
Award: Irene C. Peden Fellowship, 2021, 2022.
Award: GSFEI Top Scholar Recruitment Award, 2020.
Teaching Assistant: Computer Vision, Machine Learning, Digital Signal Processing (leading lab and discussion sessions).
Organizer: NeuroAI Seminar Organizer, 2021-2023.

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, *et al.*, "Predicting auditory feedback control of speech production from subregional shape of subcortical structures," *Human Brain Mapping*, 2017.