ZHENGYANG YU

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EDUCATION

Computer Science and Mathematics, Goethe University Frankfurt 2021 - 2025
Ph.D. in Computer Science

- *Advisor*: Prof. Jochen Triesch
- *Research area*: Self-supervised learning, egocentric video, object recognition

Electronic Engineering, Xidian University 2018 - 2021
M.Sc. in Electronic science and technology

- *Advisor*: Prof. Jianlong Tang
- *Research area*: Radar signal modulation recognition

Mechanical and Precision Instrument Engineering, Xi'an University of Technology 2014 - 2018
B.Sc. in Optoelectronic information science and engineering

PUBLICATIONS

1. **Yu Z.**, Yu, C., and Triesch, J., Simulated Cortical Magnification Supports Self-Supervised Object Learning, *In IEEE International Conference on Development and Learning* (ICDL), 2024.
2. **Yu Z.**, Aubret, A., Raabe, M. C., Yang, J., Yu, C., and Triesch, J. (2024). Toddlers' Active Gaze Behavior Supports Self-Supervised Object Learning. arXiv preprint arXiv:2411.01969.
3. **Yu Z.**, Triesch J, CRE: Circle relationship embedding of patches in vision transformer, *In European Symposium on Artificial Neural Networks* (ESANN), 2023.
4. **Yu Z.**, Tang J., and Wang Z., GCPS: A CNN Performance Evaluation Criterion for Radar Signal Intrapulse Modulation Recognition, *IEEE Communications Letters*, 2021.
5. **Yu Z.**, Tang J., Radar signal intra-pulse modulation recognition based on contour extraction, *In IEEE International Geoscience and Remote Sensing Symposium* (IGARSS), 2020.
6. **Yu Z.**, Tang J., et al., Research on against improved PRI transform sorting method, *In Chinese Institute of Electronics, Proceedings of the Conference on Aerospace Electronic*, 2019.
7. Raabe, M. C., López, F. M., **Yu Z.**, Caplan, S., Yu, C., Shi, B. E., and Triesch, J., Saccade Amplitude Statistics are Explained by Cortical Magnification, *In IEEE International Conference on Development and Learning* (ICDL), 2023.
8. Schneider, F., Xu, X., Ernst, M. R., **Yu Z.**, and Triesch, J, Contrastive learning through time, *In SVRHM Workshop@NeurIPS*, 2021.
9. Ding J., Tang J., and **Yu Z.**, Design of lightweight incremental ensemble learning algorithm, *Journal of Systems Engineering and Electronics*, 2021.
10. Zhu Y., Hou Y., Zhang H., and **Yu Z.**, Life Signal Detection Based on Singular Spectrum Analysis in the Terahertz Band, *In 5th International Conference on Communication, Image and Signal Processing* (CCISP), 2020.

PROJECTS

Self-supervised learning based on infant head-cam video 2023 - Present
Collaboration with Prof. Chen Yu, Developmental Intelligence Lab, University of Texas at Austin (U.T. Austin)

Developing minds 2021 - Present
Working at Triesch's Lab, Frankfurt Institute for Advanced Studies (FIAS)

Graduate Innovation Fund Project 2021
Working at the Department of Electronic Engineering, Xidian University

Recognition System of Radar Signal 2019 - 2020
Working at the Key Laboratory of Electronic Information Countermeasure and Simulation Technology, Department of Electronic Engineering, Xidian University

AWARDS

Xidian Graduate Scholarship 2018-2020
Excellent Undergraduate Thesis 2018
National Encouragement Scholarship 2016
Wujiang Eco-Tech Innovation Scholarship 2015

SKILLS

Languages: Chinese, English
Programming: Python, PyTorch, MATLAB, C++, Java

ACADEMIC SERVICES

Reviewers for: IEEE Communications Letters,
ICLR, ESANN, SVRHM