Sanjoy Kundu

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https://sanjoykundu.github.io/
GoogleScholar

Profile Summary

- About 4.5 years research experience in **computer vision** and **deep learning**
- Areas of interests are but not limited to multi-modal learning (text and image, text and video/audio), Generative models, Foundation models, scene graph generation, visual question answering, video understanding, image and video captioning etc.

Experience

Summer 2024

■ NEC Laboratory America Inc, Princeton, New Jersey

I worked on representation learning of multi-view ego-exo videos for procedure understanding in egocentric videos

Education

Fall 2023 - current

Ph.D., Auburn University, Auburn, Alabama in Computer Science and Software Engineering (**Transferred from OSU**)

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■ Ph.D., Oklahoma State University, Stillwater, Oklahoma in Computer Science (Transferred to AU)

2016 - 2019

M.S., Stamford University, Bangladesh in Computer Science and Engineering

2009 - 2013

■ B.S., Khulna University of Engineering and Technology in Electronics and Communication Engineering

Research Publications

- S. Kundu, S. N. Aakur, and S. Trehan, "ALGO: Discovering Novel Actions in an Open World with Object-Grounded Visual Commonsense Reasoning," *arXiv*, vol. arXiv:2406.05722, 2023 [Accepted at ECCV 2024]. @ URL: https://arxiv.org/abs/2406.05722.
- S. Kundu and S. N. Aakur, "IS-GGT: Iterative Scene Graph Generation With Generative Transformers," Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023, vol. pp. 6292-6301, 2023. URL: https://openaccess.thecvf.com/content/CVPR2023/html/Kundu_IS-GGT_Iterative_Scene_Graph_Generation_With_Generative_Transformers_CVPR_2023_paper.html.
- S. N. Aakur, S. Kundu, and N. Gunti, "Knowledge Guided Learning: Open World Egocentric Action Recognition with Zero Supervision," *Pattern Recognition Letter*, vol. 156, 38-45, 2022. URL: https://www.sciencedirect.com/science/article/abs/pii/S0167865522000733.
- S. Kundu, N. Gunti, B. Hendrickson, M. S, and S. Aakur, "Benchmark and Evaluation of Low Resource Object Detection in Biomedical Images," 2020 IEEE Applied Imagery Pattern Recognition Workshop (AIPR), 2020. ODI: 10.1109/AIPR50011.2020.9425104.

Skills

Skills (continued)

ML/DL tools

Pytorch, Tensorflow, Keras Open-Cv, Scikit-learn, Pandas, Numpy, SciPy, Matplotlib, NetworkX, etc.

Misc.

Academic research, teaching

Voluntary Activities

Mentored graduate students in Oklahoma State University and Auburn University

Summer 2022

- Mentored one under-graduate student as part of the REU program
- Worked as a reviewer for NeuRIPs 2024, ICLR 2023, CVPR 2024, NeuRIPS 2023, CVPR 2022, ACM Multimedia 2021, RA-L, ICPR 2022, ICMLA 2023 etc.

Awards

Received Graduate College **Robberson Summer 2021 Research and Creative Activity Grant** from Graduate College, Oklahoma State University

2000-2009

- Obtained government and non-government scholarships for good academic performance
- 2003 Divisional and Institutional awards for creative writing

Leadership Experience

Served as a **Sports Secretary** for Bangladesh Student Association, Oklahoma State University, Stillwater, OK