

Sai Saketh Rambhatla

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Summary

I am a Postdoctoral Researcher at Meta AI Research, where I am part of a team advancing state-of-the-art video generation methods. I earned my PhD in Electrical Engineering from the University of Maryland, College Park, where I developed algorithms for supervised, semi-supervised and unsupervised problems like localization and discovery of novel categories, few-shot classification, robust object detection, tracking, and neural network ensembles.

Employment

- Postdoctoral Researcher**, Meta AI Research, New York Jan. 2023 to Present
- Developed novel Gen-AI techniques for **generation** ([Emu-Video](#), [InstanceDiffusion](#)) and **evaluation** ([SelfEval](#)).

Education

- PhD in Electrical Engineering**, University of Maryland, College Park Aug. 2016 to Dec. 2022
- Advisors: Rama Chellappa and Abhinav Shrivastava
 - Thesis title: Towards in-the-wild Visual Understanding.
- Masters in Electrical Engineering**, University of Maryland, College Park Aug. 2016 to Dec. 2021
- Advisor: Rama Chellappa
- Dual degree in Electrical Engineering**, Indian Institute of Technology, Kharagpur June 2011 to June 2016
- Advisor: Pranab Kumar Datta and Rajeev Ranjan Sahay
 - Thesis title: Body pose classification using Deep Learning.

Selected Publications

- SelfEval: Leveraging the discriminative nature of generative models for evaluation.
Saketh Rambhatla, Ishan Misra
Under submission
- Emu Video: Factorizing Text-to-Video Generation by Explicit Image Conditioning.
Rohit Girdhar, Mannat Singh, Andrew Brown, Quentin Duval, Samaneh Azadi, *Sai Saketh Rambhatla*, Mian Akbar Shah, Xi Yin, Devi Parikh, Ishan Misra
Under submission
- InstanceDiffusion: Instance-level Control for Image Generation
Xudong Wang, Trevor Darrell, *Sai Saketh Rambhatla*, Rohit Girdhar, Ishan Misra
Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- MOST: Multiple Object localization with Self-supervised Transformers for object discovery.
Saketh Rambhatla, Ishan Misra, Rama Chellappa, Abhinav Shrivastava
International Conference on Computer Vision (ICCV), 2023
- SparseDet: Improving Sparsely Annotated Object Detection with Pseudo-positive Mining.
*Saketh Rambhatla**, Saksham Suri*, Rama Chellappa, Abhinav Shrivastava
International Conference on Computer Vision (ICCV), 2023
- The Pursuit of Knowledge: Discovering and Localizing New concepts using Dual Memory
Saketh Rambhatla, Rama Chellappa, Abhinav Shrivastava
International Conference on Computer Vision (ICCV), 2021

- Towards Discovery and Attribution of Open-world GAN Generated Images
Saksham Suri*, Sharath Girish*, *Saketh Rambhatla*, Abhinav Shrivastava
International Conference on Computer Vision (ICCV), 2021
- Recognizing actions using object states
Nirat Saini, Bo He, Gaurav Shrivastava, *Saketh Rambhatla*, Abhinav Shrivastava
International Conference on Learning Representations Workshops 2022
- An empirical analysis of boosting neural networks
Saketh Rambhatla, Michael Jones, Rama Chellappa
International Joint Conference on Neural Networks 2022
- Towards Accurate Visual and Natural Language-Based Vehicle Retrieval Systems
Khorramshahi P*, *Rambhatla S.**, Chellappa R.
Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2021
- Towards real-time systems for vehicle re-identification, multi-camera tracking, and anomaly detection
Peri N.*, Khorramshahi P*, *Rambhatla S.**, Shenoy V., Rawat S., Chen J.C. , Chellappa R.
Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2020
- Detecting Human-Object Interactions using Functional Common-Sense
Ankan Bansal, *Sai Rambhatla*, Abhinav Shrivastava, Rama Chellappa
Thirty-Fourth AAAI Conference on Artificial Intelligence, New York, USA, 2020
- A dual-path model with adaptive attention for vehicle re-identification
Khorramshahi P., Kumar A., Peri N., *Rambhatla S. S.*, Jun-Cheng Chen, Rama Chellappa
International Conference on Computer Vision (ICCV), Seoul, Korea, 2019
- Body Part Alignment and Temporal Attention for Video-Based Person Re-Identification
Sai Rambhatla, Michael Jones
Proceedings of the British Machine Vision Conference (BMVC), Cardiff, UK, 2019

Research Internships

Cruise AI, San Francisco (2022)

Developed efficient algorithms for continual self-supervised learning.

Advisors: [Dr. Xiao Zhang](#), [Dr. Carl Vondrick](#)

Mitsubishi Electric Research Laboratory, Boston (2018, 2019)

Worked on video-based person re-identification and ensembles of deep neural networks.

Advisor: [Dr. Mike Jones](#)

Awards

- Awarded the **Ann G. Wylie Dissertation fellowship** for the academic year 2021-22.
- Selected for the A. James Clark School of Engineering **Future Faculty Cohort** for the academic year 21-22.
- Awarded the prestigious **George Corcoran Award** for excellence in teaching for the academic year 2017-18.
- Awarded **Outstanding Teaching Assistant Award** for the academic year 2017-18.
- Awarded **Outstanding reviewer** for Neurips 2023.
- Awarded **Outstanding reviewer** for CVPR 2021.
- Awarded **Best Paper Award (Honorary Mention)** at ANTS 2016, Bangalore.

Academic Service

Reviewing

- CVPR ('19-'24), ECCV ('20-'24), ICCV ('19-'23), ICLR ('23-'24) Neurips 2023, ICML 2024.
- International Journal on Computer Vision (IJCV), IEEE Pattern Recognition Letters