

Curriculum Vitae - Aditya Sarkar

PhD Student · University of Maryland

+1 (858) 518-3066 ✉ asarkar6@umd.edu 🏠 kingston-aditya 🌐 kingston-aditya 📄 aditya-sarkar

Research Interests

Video Understanding Action recognition · Spatiotemporal representation learning
Multimodal learning Visual (images, videos) · Textual (natural language)

Education

University of Maryland College Park College Park, MD, US
PhD in Computer Engineering 2024 – 2029

- Research in Computer vision
- **Collaborators:** David Jacobs, Nuno Vasconcelos
- **GPA:** 4.00/4

Indian Institute of Technology (IIT) Mandi India
BTech (Honors) in Electrical Engineering (Gold Medalist) 2019 – 2023

- President of India Gold Medal awardee
- **GPA:** 3.98/4

Experience

Meta AI College Park, MD
Research Collaborator Mar. '26 – Present

- **Collaborators:** David Jacobs, Shlok Mishra, Zihao Wang

Statistical Visual Computing Lab, University of California San Diego, CA
Research Intern Sept. '23 – Nov. '24

- **PI:** Nuno Vasconcelos. Published in **ICLR '26**

Machine Learning and Genomics Lab, University of California Los Angeles, CA
Research Intern July '20 – May '22

- **PI:** Serghei Mangul, Eleazar Eskin. Published 3 papers in **Genome Biology** (IF 17.9), **Briefings in Bioinformatics** (IF 13.99) and **PeerJ CS** (2.5).

Honors & Awards

- **Graduate fellowship** at University of Maryland in 2024.
- **Walmart Predoc Fellowship**, Department of CSA, IISc Bangalore in 2023.
- **Graduate scholarship**, Department of CS, UCLA in 2022.
- **President of India Gold Medal**, Department of SCEE, IIT Mandi in 2023.
- **Institute Silver Medal** for best thesis, Department of SCEE, IIT Mandi in 2023.
- **National Talent Search Scholarship**, Government of India in 2017.

Technical Skills

Programming Languages Python, MATLAB, C++, HTML/CSS, Bash/Unix, Git.
Deep Learning PyTorch, Tensorflow, Accelerate, Distributed Training.
Languages English, Japanese

Academic Service

Peer reviewer CVPR '26
Teaching Assistant ENEE222, ENEE290, CMSC415

Publications & Ongoing Projects

Memory Augmented Plug-and-Play Selective Prediction

Aditya Sarkar, Yi Li, Jiacheng Cheng, Shlok Kumar, Nuno Vasconcelos

Sep '24 - Jan '25

ICLR '26

Attributes are all you need to quantify Video Complexity

Aditya Sarkar, Y. Li, ···, A. Singh, S. Mishra, D. Jacobs, N. Vasconcelos

Aug '25 - Oct '25

Under review

Analyzing how Video-LLMs understand symbols in Multiple Choice Questions.

Aditya Sarkar, S. He, Y. Li, J. Cheng, S. Mishra, D. Jacobs, A. Li, N. Vasconcelos

Oct '25 - Present

To be submitted in NeurIPS

Trinity: Image Generation From Interleaved Image-Text Prompt

Aditya Sarkar, X. Pan, S.N. Sai, S. Ghosh, S. Mishra, A. Singh, D. Jacobs

Jan '26 - Present

Ongoing

Video understanding with one-step diffusion models

Aditya Sarkar, R. Rawal, Y. Li, ···, A. Singh, S. Mishra, D. Katabi, T. Goldstein

Feb '26 - Present

Ongoing