Aniruddha Mahapatra

Curriculum Vitae

Education

2022-2023 Carnegie Mellon University

Master of Science in Computer Vision (Robotics Institute)

CGPA: 4.00/4.00

2022-2023 Indian Institute of Technology, Roorkee

Bachelor of Technology in Computer Science and Engineering

CGPA: 9.41/10.00, Department Rank: 2

Experience

2024-Present Adobe Research

Research Engineer at Creative Intelligence Lab

2022–2023 Generative Intelligence Lab, CMU

Research Assistant under Professor Jun-Yan Zhu

2023 Snap Research

Research Intern at Creative Vision Group

2020-2022 Adobe Research

Research Associate at Adobe Research India

2019 Adobe Research

Research Intern at Adobe Research India

Selected Publications

See the full list on Google Scholar Page.

- [1] Aniruddha Mahapatra*, Richa Mishra*, Renda Li, Ziyi Chen, Boyang Ding, Shoulei Wang, Jun-Yan Zhu, Peng Chang, Mei Han, and Jing Xiao. Co-speech gesture video generation with 3d human meshes. In *European Conference on Computer Vision* (*ECCV*), 2024.
- [2] Songwei Ge, Aniruddha Mahapatra, Gaurav Parmar, Jun-Yan Zhu, and Jia-Bin Huang. On the Content Bias in Fréchet Video Distance. In *The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024.
- [3] Aniruddha Mahapatra, Aliaksandr Siarohin, Hsin-Ying Lee, Sergey Tulyakov, and Jun-Yan Zhu. Text-Guided Synthesis of Eulerian Cinemagraphs. In *ACM Transactions on Graphics* (SIGGRAPH Asia), 2023.
- [4] Rishi Agarwal*, Tirupati Saketh Chandra*, Vaidehi Patil*, Aniruddha Mahapatra*, Kuldeep Kulkarni, and Vishwa Vinay. GEMS: Scene Expansion using Generative Models of Graphs. In *IEEE/CVF Winter Conference on Applications of Computer Vision* (**WACV**), 2023.

- [5] Aniruddha Mahapatra and Kuldeep Kulkarni. Controllable Animation of Fluid Elements in Still Images. In *The IEEE/CVF Conference on Computer Vision and Pattern Recognition* (CVPR), 2022.
- [6] Aniruddha Mahapatra, Snarmila Nangi, Aparna Garimella, and Anandhavelu Natarajan. Entity Extraction in Low Resource Domains with Selective Pre-training of Large Language Models. In Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022.
- [7] Bholeshwar Khurana, Soumya Ranjan Dash, Abhishek Bhatia, Aniruddha Mahapatra, Hrituraj Singh, and Kuldeep Kulkarni. SemIE: Semantically-aware Image Extrapolation. In *The International Conference on Computer Vision (ICCV)*, 2021.

Selected Preprints

- [1] Aniruddha Mahapatra, Long Mai, Yitian Zhang, David Bourgin, Feng Liu. Progressive Growing of Video Tokenizers for Highly Compressed Latent Spaces. In arXiv, 2025.
- [2] Jinbo Xing, Long Mai, Cusuh Ham, Jiahui Huang, Aniruddha Mahapatra, Chi-Wing Fu, Tien-Tsin Wong, Feng Liu. MotionCanvas: Cinematic Shot Design with Controllable Image-to-Video Generation. In *arXiv*, 2025.

Patents

- [1] Bholeshwar Khurana, Soumya Ranjan Dash, Abhishek Bhatia, Aniruddha Mahapatra, Hrituraj Singh, and Kuldeep Kulkarni. Semantically-aware image extrapolation. *US Patent* 12,020,403.
- [2] Rishi Agarwal, Tirupati Saketh Chandra, Vaidehi Patil, Aniruddha Mahapatra, Kuldeep Kulkarni, and Vishwa Vinay. Generating enriched scenes using scene graphs. *US Patent App.* 17/962,962.
- [3] Aniruddha Mahapatra, and Kuldeep Kulkarni. Machine learning based controllable animation of still images. US Patent App. 17/856,362.
- [4] Subrata Mitra, Aniruddha Mahapatra, Manoj Kilaru, Abhishek Yadav, Abhijith Kuruba, and Kuldeep Kulkarni. System and methods for video analysis. US Patent App. 17/651,076.
- [5] Aniruddha Mahapatra, Snarmila Nangi, Aparna Garimella, and Anandhavelu Natarajan. Pre-training techniques for entity extraction in low resource domains. *US Patent App.* 17/525,311.

Academic Service

Reviewer CVPR 2025, ECCV 2024 (Outstanding), SIGGRAPH 2024, SIGGRAPH Asia 2024, CVPR 2024, ICCV 2023

Computer Skills

Programming Advanced: Python; Intermediate: C++ Languages

Developer Advanced: VS Code, Cursor, Linux, Git; Intermediate: Docker

Tools

Frameworks Advanced: PyTorch, PyTorch Lightning