Deepti Ghadiyaram

Department of Computer Science, Boston University
CDS 823, 665 Commonwealth Ave, Boston, MA 02215
Google Scholar
LinkedIn

Email: dghadiya@bu.edu
https://deeptigp.github.io/

Education

Ph.D in Computer Science   Aug. 2011 - Aug. 2017
University of Texas at Austin
Bachelor of Technology (Hons.) in Computer Science   July 2005 - May 2009
International Institute Of Information Technology

Selected Positions Held

Boston University   July 2024 - current
Assistant Professor, Department of Computer Science
Affiliated Faculty, Department of Electrical and Computer Engineering and
Faculty of Computing & Data Sciences

Runway   May 2023 - current
Member of Technical Staff

Fundamental AI Research (FAIR), Meta AI   Oct. 2017 - Jan. 2023
Senior Research Scientist & Tech. Lead

Selected Awards

- Named Computing & Data Sciences (CDS) Faculty Fellow in 2024
- Recipient of the Distinguished alumni award of IIIT-Hyderabad in 2021.
- Second place in EPIC-Kitchens CVPR 2019 Action Recognition Challenge.
- Recipient of UT-Austin's Graduate Recruitment Fellowship offered to those who rank in the top 10% of all students by the Department of Computer Science for the academic years 2013-2016.

Invited and Conference Talks

- WorldModelBench: The 1st Workshop on Benchmarking World Models, a workshop at CVPR 2025.
- Scalable Generative Models in Computer Vision, a tutorial at CVPR 2025.
- EURASIP Journal on Image and Video Processing webinar, June 2025.
- Invited speaker at Video @Scale, 2024.
- AI4ALL at BU: Invited talk to high school female students to highlight the research and career opportunities in AI.
- Diffusion-based Video Generative Models, Tutorial at CVPR 2024
- "Future of Computer Vision Datasets," Invited speaker at CVPR 2021.
- "Learning Generalized Visual Representations at Facebook," Invited talk at NeurIPS, Dec. 2020.

Mentoring

- **PhD students:** Dahye Kim (from Fall'24), Tianle Chen (from Fall'24), Xavier Thomas (from Fall'25), Youngsun Lim (from Fall'25), Manushree Vasu (from Fall'25).
- **MS students:** Chaitanya Chakka (from Spring'25), Satya Galla (Spring'25), Ketan Saichandran (Spring'25).
- **High school students:** Audrey Zhang (Summer'25) and Ananya Srinivasan (Summer'25).
- **Internship mentorship:** Zhenheng Yang (Summer'18), Krishna Kumar Singh (Summer'19), Simon Vanderhende (Fall'21)
- **University collaborations:** Zhenqiang Ying, Haoran Niu, Maniratnam Mandal (UT-Austin, 2018 - 2021) Vikram Ramaswamy, Sing Yu Lin, Dora Zhao (Princeton, 2021-2022)
- **Career support:** Several junior women research engineers and scientists (Meta AI, 2018-2022, WiML, 2019 - present).

Professional Service Activity

Program Chair	NeurIPS'22 Datasets and Benchmarks track, Broadening Participation Chair, CVPR 2025
Workshop Organizer	Responsible Computer Vision (ECCV'22)
	XAI4CV: Explainable Artificial Intelligence for Computer Vision (CVPR 2022-2024)
	Responsible Computer Vision (CVPR'21, ECCV'22)
Workshop reviewer	ICCV'21
Program Committee Member	AAAI-20
Area Chair	WACV'24, WiML'20, CVPR'21, WiML@NeurIPS'21, AAAI'22.
Thesis Committees	Zhenqiang Ying (PhD, UT-Austin, Jan'22), Siqi Wang (PhD, BU'25),
	Saunak Bhattacharjee (MS, BU'25) Xavier Thomas (MS, BU'25), Sha Lai (PhD, BU'25)

Journal Reviewer

- IEEE Transactions of Image Processing, '13,'14,'15,'16,'17,'18,'19.
- IEEE Transactions. on Multimedia, '16,'17,'18,'19.
- Electronics Letters, '16,'17,'18,'19.
- IEEE Transactions on Circuits and Systems for Video Technology, '15,'16,'17,'18,'19.
- Digital Signal Processing, '15,'16,'17,'18,'19.
- EURASIP Journal on Image and Video Processing, '15,'16,'17,'18,'19.
- IEEE Journal of Selected Topics in Signal Processing, '15,'16,'17,'18,'19.

Conference Reviewer

- Conference on Computer Vision and Pattern Recognition (CVPR), '20, '22, '23.
- Neural and Information Processing Systems (NeurIPS), '22.
- European Conference on Computer Vision (ECCV), '22.
- Association for the Advancement of Artificial Intelligence (AAAI) Conference on Artificial Intelligence, '20, '22.
- The Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), '14, '17, '18, '19,'20,'21, '22, '23.
- Women in Machine Learning Workshop, '19, '20, '21, '22.
- ACM SIGGRAPH, '17.

Selected Publications

(Full list here)

- K. Nichols, N. Tasnim, Y. Yan, N. Ikechukwu, E. Zou, **D. Ghadiyaram**, B. A Plummer, "Right Side Up? Disentangling Orientation Understanding in MLLMs with Fine-grained Multi-axis Perception Tasks," arXiv preprint arXiv:2505.21649.
- D. Kim, X. Thomas, and **D. Ghadiyaram**, "Revelio: Interpreting and leveraging semantic information in diffusion models," ICCV, 2025.
- D. Kim and **D. Ghadiyaram**, "Concept Steerers: Leveraging K-Sparse Autoencoders for Controllable Generations," (under review).
- K.S. Saichandran, X. Thomas, P. Kaushik, **D. Ghadiyaram**, "Progressive Prompt Detailing for Improved Alignment in Text-to-Image Generative Models," CVPRW, 2025
- X. Thomas and **D. Ghadiyaram**, "What's in a Latent? Leveraging Diffusion Latent Space for Domain Generalization," ICCV, 2025.
- T. Chen, C. Chakka, and **D. Ghadiyaram**, "Improving Physical Object State Representation in Text-to-Image Generative Systems," CVPRW'25.
- **D. Ghadiyaram**, "Foundations for Safe Generative Media," https://runwayml.com/research/foundations-for-safe-generative-media, 2024.
- P. Esposito, P. Atighehchian, A. Germanidis, **D. Ghadiyaram**, "Mitigating stereotypical biases in text to image generative systems," NeurIPS Datasets and Benchmarks Track 2023.
- S. Vandenhende, D. Mahajan, F. Radenovic, and **D. Ghadiyaram** "Making Heads or Tails: Towards Semantically Consistent Visual Counterfactuals," ECCV 2022.
- K. K. Singh, D. Mahajan, K. Grauman, Y. J. Lee, M. Feiszli, and **D. Ghadiyaram**, "Don't Judge an Object by Its Context: Learning to Overcome Contextual Bias," CVPR 2020 (**Oral**).
- **D. Ghadiyaram**, M. Feiszli, D. Tran, X. Yan, H. Wang, and D. Mahajan, "Large-scale weakly-supervised pre-training for video action recognition," *CVPR*, Long Beach, June 16 - 20, 2019.