

Kumar Ashutosh

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🌐 <https://ashutoshkr.me>

Education

2021 – Present	📖 The University of Texas at Austin Ph.D. in Computer Science Advisor: Kristen Grauman Research area: Computer Vision, Machine Learning	Austin, TX
2016 – 2021	📖 Indian Institute of Technology Bombay Master's degree in Electrical Engineering Thesis title: <i>3D Shape Reconstruction with View-Planning</i> .	Mumbai, India
	📖 Indian Institute of Technology Bombay Bachelor's degree in Electrical Engineering with a Minor in Computer Science	

Work Experience

Present	📖 UT Austin , Graduate Research Assistant	Austin, TX
Summer 2025	📖 GenAI, Meta , Research Scientist Intern	New York, NY
2023-25	📖 FAIR, Meta , Visiting Researcher	Austin, TX
Summer 2022	📖 FAIR, Meta , Research Intern	New York, NY
Winter 2019	📖 360World , AR/VR Developer Intern	Budapest, Hungary
Summer 2019	📖 Sony Corporation , Research Engineer Intern	Kanagawa, Japan
Summer 2018	📖 National University of Singapore , Research Intern	Singapore
	📖 Google Summer of Code , Developer	Remote











Research Publications

Preprints

- 1 C. H. Wu*, **K. Ashutosh***, and K. Grauman, "Stitch-a-Recipe: Video Demonstration from Multistep Descriptions," 2025. arXiv: 2503.13821 [cs.CV].
- 2 **K. Ashutosh**, R. Girdhar, L. Torresani, and K. Grauman, "What You Say Is What You Show: Visual Narration Detection in Instructional Videos," 2023. arXiv: 2301.02307 [cs.CV].








Conference Proceedings

- 1 **K. Ashutosh**, Y. Gandelsman, X. Chen, I. Misra, and R. Girdhar, "LLMs can see and hear without any training," in *Proceedings of the International Conference on Machine Learning (ICML)*, 2025, 📄.
- 2 M. Huh, Z. Xue, U. Das, **K. Ashutosh**, K. Grauman, and A. Pavel, "Vid2Coach: Transforming How-To Videos into Task Assistants," in *The ACM Symposium on User Interface Software and Technology (UIST)*, 2025, 📄.
- 3 **K. Ashutosh**, T. Nagarajan, G. Pavlakos, K. Kitani, and K. Grauman, "ExpertAF: Expert Actionable Feedback from Video," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2025, 📄.
- 4 **K. Ashutosh**, G. Pavlakos, and K. Grauman, "FIction: 4D Future Interaction Prediction from Video," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2025, **Highlight paper (Top 3%)** 📄.




- 5 **K. Ashutosh**, Z. Xue, T. Nagarajan, and K. Grauman, "Detours for Navigating Instructional Videos," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024, **Highlight paper (Top 2.8%)** .
- 6 C. Chen, **K. Ashutosh**, R. Girdhar, D. Harwath, and K. Grauman, "Discovering Sounding Actions in Video with Multimodal Consensus," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024.
- 7 K. Grauman, A. Westbury, L. Torresani, *et al.*, "Ego-Exo4D: Understanding Skilled Human Activity from First- and Third-Person Perspectives," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024, **Oral paper (Top 0.8%)** .
- 8 Z. Xue, **K. Ashutosh**, and K. Grauman, "Learning Object State Changes in Videos: An Open-World Perspective," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024, .
- 9 **K. Ashutosh**, S. Ramakrishnan, T. Afouras, and K. Grauman, "Video-Mined Task Graphs for Keystep Recognition in Instructional Videos," in *Advances in Neural Information Processing Systems (NeurIPS)*, 2023, .
- 10 **K. Ashutosh**, R. Girdhar, L. Torresani, and K. Grauman, "HierVL: Learning Hierarchical Video-Language Embeddings," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2023, **Highlight paper (Top 2.5%)** .
- 11 A. Jaiswal, **K. Ashutosh**, J. F. Rousseau, Y. Peng, Z. Wang, and Y. Ding, "RoS-KD: A Robust Stochastic Knowledge Distillation Approach for Noisy Medical Imaging," in *2022 IEEE International Conference on Data Mining (ICDM)*, Dec. 2022, .
- 12 **K. Ashutosh**, S. Kumar, and S. Chaudhuri, "3D-NVS: A 3D Supervision Approach for Next View Selection," in *2022 26th International Conference on Pattern Recognition (ICPR)*, Aug. 2022, .
- 13 **K. Ashutosh**, J. Nair, A. Kagrecha, and K. Jagannathan, "Bandit algorithms: Letting go of logarithmic regret for statistical robustness," in *Proceedings of The 24th International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2021, **Oral presentation (Top 3%)** .
- 14 **K. Ashutosh**, "Hardware Performance Analysis of Mobile-Based Augmented Reality Systems," in *2020 International Conference on Computational Performance Evaluation (ComPE)*, 2020, .
- 15 **K. Ashutosh**, S. Consul, B. Dedhia, P. Khirwadkar, S. Shah, and S. Kalyanakrishnan, "Lower Bounds for Policy Iteration on Multi-action MDPs," in *2020 59th IEEE Conference on Decision and Control (CDC)*, 2020, .
- 16 R. Bose, **K. Ashutosh**, J. Li, A. Dragomir, N. Thakor, and A. Bezerianos, "A Multilayer Network Approach for Studying Creative Ideation from EEG," in *Brain Informatics*, Springer International Publishing, 2018, .

Professional Service




Reviewer

CVPR 2024	 Outstanding reviewer (Top 2% out of 10k reviewers)
NeurIPS 2024	 Top reviewer (Top 8% out of 14k reviewers)
2023-25	 The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
2023	 The IEEE/CVF International Conference on Computer Vision (ICCV)
2022-24	 European Conference on Computer Vision (ECCV)
2025	 International Journal of Computer Vision (IJCV)
2024	 Neural Information Processing Systems (NeurIPS)

Professional Service (continued)

- 2024-25, 22  The IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)
- 2024  Asian Conference on Computer Vision (ACCV)
- 2025  AAAI Conference on Artificial Intelligence (AAAI)











Teaching Assistant

- Spring 2025  *Visual Recognition* in Computer Science, UT Austin
- Spring 2021  *Matrix Computations* in Electrical Engineering, IIT Bombay
- Autumn 2020  *Applied Linear Algebra* in Electrical Engineering, IIT Bombay











Responsibilities

- 2019 – 2020  Department Academic Mentor Coordinator in Electrical Engineering, IIT Bombay
- 2018 – 2021  Institute and Department Academic Mentor, IIT Bombay
- 2017 – 2018  Convener of *Web n Coding Club*, IIT Bombay













Open Source

- 2025  Open sourced code implementations of authored papers: , , , ,  (500+ stars)
- 2023  Contributed to PyTorch codebase 
- 2017  Contributed 2k+ lines of code to scikit-learn, a popular ML package 


Awards and Achievements

- 2025  Egocentric Vision (EgoVis) 2023/2024 Distinguished Paper Award for HierVL (CVPR 2023)
-  Professional Development Award by UT Austin to attend CVPR 2025
- 2023  Professional Development Award by UT Austin to attend NeurIPS 2023
-  Professional Development Award by UT Austin to attend CVPR 2023
- 2020  Department Color by IIT Bombay for valuable contribution to the mentorship program
- 2017  Invited to the Republic Day Parade as a guest of the Hon'ble Prime Minister of India
- 2016  Rashtrapati Puraskar (President's Award) by the Hon'ble President of India for Scouting
-  99.97 (out of 1.2M) and 99.14 percentile (out of 0.15M) in JEE Mains and Advanced
- 2015  Qualified Indian National Mathematical Olympiad and attended selection camp for IMO
-  Cleared NTSE and KVPY scholarship exams organized by the Govt. of India

Press Coverage

- 2025  Blogs and discussions of MILS (ICML 2025) by readers:  (Medium)  (YCombinator News)
- 2024  Ego-Exo4D's (CVPR 2024) media coverage:  
- 2023  Meta AI's coverage of HierVL (CVPR 2023) paper : , , , 

Talks

- 2025  Oral presentation of Fiction (CVPR 2025) at Egocentric Vision (EgoVis) Workshop, CVPR 2025

Talks (continued)

- 2024
 - Invited talk to present our paper MILS (ICML 2025) at Cohere AI
 - Invited talk to present our paper ExpertAF (CVPR 2025) at Ego4D winter symposium 2024
 - Invited talk at IIT Delhi in Jan titled “Long-video understanding with text supervision”
- 2023
 - Highlight presentation of HierVL at CVPR 2023 [🔗](#)
 - Invited talk at International Workshop on Large Scale Holistic Video Understanding, CVPR 2023
- 2021
 - Oral presentation of our work at AISTATS 2021 [🔗](#)
- 2020
 - Invited talk on Augmented Reality Applications at Electronics and Robotics Club, IIT Bombay

Technical Skills

- Languages
 - Python, C++, C, HTML, CSS, \LaTeX
- ML Tools
 - Huggingface, Deepspeed, Fairseq, SLURM, PyTorch, Tensorflow, Git
- Development
 - React, Jekyll, Android Studio, Xcode, Unity

Extracurricular Activities

- Sports
 - Football (Soccer), Squash, Cricket, Tennis, Badminton
- Activities
 - Hiking, Running
- Music
 - Guitar, Piano/Keyboard