# Tejas Gokhale

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Website: https://www.tejasgokhale.com

Mail: 1000 Hilltop Circle, ITE 214, Baltimore MD 21250

Current Assistant Professor

POSITION Department of Computer Science & Electrical Engineering

University of Maryland, Baltimore County

Affiliated Faculty, UMBC AI Center

**Director**, Cognitive Vision Group

Education Doctor of Philosophy, Arizona State University

School of Computing and Augmented Intelligence

Advisors: Yezhou Yang, Chitta Baral Thesis: Towards Reliable Semantic Vision

Master of Science, Carnegie Mellon University 2017

2023

Department of Electrical and Computer Engineering

Mentor: Aswin Sankaranarayanan

Bachelor of Engineering (Honours), BITS Pilani 2015

Department of Electrical and Electronics Engineering

EMPLOYMENT Microsoft Research Summer 2022

HISTORY Research Intern, Adaptive Systems and Interaction Group

Mentors: Hamid Palangi, Besa Nushi, Vibhav Vineet, Eric Horvitz

Lawrence Livermore National Laboratory Summer 2021, 2020

Research Scholar, Machine Intelligence Group

Mentors: Rushil Anirudh, Jay Thiagarajan, Bhavya Kailkhura

Arizona State University

Graduate Research Associate, School of Computing and AI 2018–2023 Graduate Teaching Associate, School of Computing and AI 2018–2020

Snap Research Summer 2018

Research Intern, Computational Imaging Group

Mentors: Guru Krishnan, Shree Nayar

Carnegie Mellon University 2017–2018

Graduate Student Researcher, Dept. of Electrical and Computer Engineering

ST Microelectronics Fall 2014

Intern, High Speed Links Group

Steel Authority of India Limited Summer 2013

Summer Intern, Bhilai Steel Plant

**PUBLICATIONS** 

See my Google Scholar page for recent updates and citation information.

Legend: My graduate advisees are underlined.

Conference proceedings are the de facto form of publication in computer vision, machine

learning, natural language processing, and AI.

### **Conference Proceedings**

- [C1] Naresh Kumar Devulapally, Shruti Agarwal, Tejas Gokhale, Vishnu Suresh Lokhande. Latent Diffusion Unlearning: Protecting against Unauthorized Personalization through Trajectory Shifted Perturbations.
  ACM Multimedia 2025
- [C2] Nilay Yilmaz, Maitreya Patel, Yiran Lawrence Luo, Tejas Gokhale, Chitta Baral, Suren Jayasuriya, Yezhou Yang. Voila: Evaluation of MLLMs For Perceptual Understanding and Analogical Reasoning. In International Conference on Learning Representations. 2025.

https://arxiv.org/abs/2503.00043

ICLR 2025

[C3] Sourajit Saha, Tejas Gokhale. Improving Shift Invariance in Convolutional Neural Networks with Translation Invariant Polyphase Sampling. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision. 2025.

https://arxiv.org/abs/2404.07410

**WACV 2025** 

[C4] Maitreya Patel, Abhiram Kusumba, Sheng Cheng, Changhoon Kim, Tejas Gokhale, Chitta Baral, Yezhou Yang. TripletCLIP: Improving Compositional Reasoning of CLIP via Vision-Language Negatives. In Advances in Neural Information Processing Systems. 2024.

https://arxiv.org/abs/2411.02545

NeurIPS 2024

[C5] Agneet Chatterjee, Gabriela Ben Melech Stan, Estelle Guez Aflalo, Sayak Paul, Dhruba Ghosh, Tejas Gokhale, Ludwig Schmidt, Hannaneh Hajishirzi, Vasudev Lal, Chitta Baral, Yezhou Yang. Getting it Right: Improving Spatial Consistency in Text-to-Image Models. In European conference on computer vision. 2024.

https://arxiv.org/abs/2404.01197

ECCV 2024

[C6] Agneet Chatterjee, Yiran Luo, Tejas Gokhale, Chitta Baral, Yezhou Yang. REVISION: Rendering Tools Enable Spatial Fidelity in Vision-Language Models. In European conference on computer vision. 2024

https://arxiv.org/abs/2408.02231

ECCV 2024

- [C7] Agneet Chatterjee, Tejas Gokhale, Chitta Baral, Yezhou Yang. On the Robustness of Language Guidance for Low-Level Vision Tasks: Findings from Depth Estimation. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, pp. 2794-2803. 2024. https://arxiv.org/abs/2404.08540
- [C8] Maitreya Patel, Tejas Gokhale, Chitta Baral, Yezhou Yang. ConceptBed: Evaluating Concept Learning Abilities of Text-to-Image Diffusion Models. In Proceedings of the AAAI Conference on Artificial Intelligence, vol. 38, no. 13, pp. 14554-14562. 2024. https://arxiv.org/abs/2306.04695
  AAAI 2024
- [C9] Sheng Cheng, Tejas Gokhale, Yezhou Yang. Adversarial Bayesian Augmentation for Single-Source Domain Generalization. In Proceedings of the IEEE/CVF International Conference on Computer Vision, pp. 11400-11410. 2023.

https://arxiv.org/abs/2307.09520

ICCV 2023

[C10] Man Luo, Zhiyuan Fang, Tejas Gokhale, Yezhou Yang, Chitta Baral. End-to-end Knowledge Retrieval for Multi-modal Queries. In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pp. 8573-8589. 2023.

https://arxiv.org/abs/2306.00424

ACL 2023

[C11] Tejas Gokhale, Rushil Anirudh, Jayaraman J. Thiagarajan, Bhavya Kailkhura, Chitta Baral, and Yezhou Yang. Improving Diversity with Adversarially Learned Transformations for Domain Generalization. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision, pp. 434-443. 2023.

https://arxiv.org/abs/2206.07736

**WACV 2023** 

- [C12] Maitreya Patel, Tejas Gokhale, Chitta Baral, and Yezhou Yang. CRIPP-VQA: Counterfactual Reasoning about Implicit Physical Properties via Video Question Answering. In Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing, pp. 9856-9870. 2022. https://arxiv.org/abs/2211.03779
- [C13] Tejas Gokhale, Abhishek Chaudhary, Pratyay Banerjee, Chitta Baral, and Yezhou Yang. Semantically Distributed Robust Optimization for Vision-and-Language Inference. In Findings of the Association for Computational Linguistics: ACL 2022, pp. 1493-1513. 2022.
  https://arxiv.org/abs/2110.07165
  ACL Findings 2022
- [C14] Tejas Gokhale, Swaroop Mishra, Man Luo, Bhavdeep Sachdeva, and Chitta Baral. Generalized but not Robust? Comparing the Effects of Data Modification Methods on Out-of-Domain Generalization and Adversarial Robustness. In Findings of the Association for Computational Linguistics: ACL 2022, pp. 2705-2718. 2022.

https://arxiv.org/abs/2203.07653

ACL Findings 2022

[C15] Neeraj Varshney, Pratyay Banerjee, Tejas Gokhale, and Chitta Baral. Unsupervised Natural Language Inference Using PHL Triplet Generation. In Findings of the Association for Computational Linguistics: ACL 2022, pp. 2003-2016. 2022.

https://arxiv.org/abs/2110.08438

ACL Findings 2022

- [C16] Yiran Luo, Pratyay Banerjee, Tejas Gokhale, Yezhou Yang, and Chitta Baral. To Find Waldo You Need Contextual Cues: Debiasing Who's Waldo. In 60th Annual Meeting of the Association for Computational Linguistics, ACL 2022, pp. 355-361. 2022. https://arxiv.org/abs/2203.16682
  ACL 2022
- [C17] Man Luo, Arindam Mitra, Tejas Gokhale, and Chitta Baral. Improving biomedical information retrieval with neural retrievers. In Proceedings of the AAAI Conference on Artificial Intelligence, vol. 36, no. 10, pp. 11038-11046. 2022.

https://arxiv.org/abs/2201.07745

AAAI 2022

[C18] Pratyay Banerjee, Tejas Gokhale, Yezhou Yang, and Chitta Baral. Weakly supervised relative spatial reasoning for visual question answering. In Proceedings of the IEEE/CVF International Conference on Computer Vision, pp. 1908-1918. 2021.

https://arxiv.org/abs/2109.01934

ICCV 2021

[C19] Pratyay Banerjee, Tejas Gokhale, Yezhou Yang, and Chitta Baral. WeaQA: Weak Supervision via Captions for Visual Question Answering. In Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021, pp. 3420-3435. 2021.

https://arxiv.org/abs/2012.02356

ACL Findings 2021

- [C20] Pratyay Banerjee, Tejas Gokhale, and Chitta Baral. Self-Supervised Test-Time Learning for Reading Comprehension. In Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pp. 1200-1211. 2021. https://arxiv.org/abs/2103.11263
  NAACL 2021
- [C21] Tejas Gokhale, Rushil Anirudh, Bhavya Kailkhura, Jayaraman J. Thiagarajan, Chitta Baral, and Yezhou Yang. Attribute-guided adversarial training for robustness to natural perturbations. In

Proceedings of the AAAI Conference on Artificial Intelligence, vol. 35, no. 9, pp. 7574-7582. 2021. https://arxiv.org/abs/2012.01806 AAAI 2021

- [C22] Tejas Gokhale, Pratyay Banerjee, Chitta Baral, and Yezhou Yang. MUTANT: A Training Paradigm for Out-of-Distribution Generalization in Visual Question Answering. In Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), pp. 878-892. 2020. https://arxiv.org/abs/2009.08566
- [C23] Zhiyuan Fang, Tejas Gokhale, Pratyay Banerjee, Chitta Baral, and Yezhou Yang. Video2 Commonsense: Generating Commonsense Descriptions to Enrich Video Captioning. In Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), pp. 840-860. 2020.

https://arxiv.org/abs/2003.05162

**EMNLP 2020** 

[C24] Tejas Gokhale, Pratyay Banerjee, Chitta Baral, and Yezhou Yang. Vqa-lol: Visual question answering under the lens of logic. In European conference on computer vision, pp. 379-396. Cham: Springer International Publishing, 2020.

https://arxiv.org/abs/2002.08325

ECCV 2020

### Journals and Magazines

[J1] Tejas Gokhale. Towards Robust Visual Understanding: A Paradigm Shift in Computer Vision from Recognition to Reasoning. AI Magazine 1–7. 2024.

https://doi.org/10.1002/aaai.12194

AI Magazine

# Peer Reviewed Workshop Papers and Extended Abstracts

- [W1] Shivanand Kundargi, Kowshik Thopalli, Tejas Gokhale. Sequentially Acquiring Concept Knowledge to Guide Continual Learning. Second Workshop on Visual Concepts. CVPR 2025 https://openreview.net/pdf?id=U4vcWks22t CVPR 2025 Workshop on Visual Concepts
- [W2] Yiran Luo, Joshua Feinglass, Tejas Gokhale, Kuan-Cheng Lee, Chitta Baral, Yezhou Yang. Grounding Stylistic Domain Generalization with Quantitative Domain Shift Measures and Synthetic Scene Images. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops. 2024.

https://arxiv.org/abs/2405.15961 CVPR 2024 Vision Datasets Understanding Workshop

- [W3] Tejas Gokhale. Towards Robust Visual Understanding: from Recognition to Reasoning. In Proceedings of the AAAI Conference on Artificial Intelligence, vol. 38, no. 20, pp. 22665-22665. 2024. https://ojs.aaai.org/index.php/AAAI/article/view/30281 AAAI New Faculty Highlights
- [W4] Tejas Gokhale, Joshua Feinglass, and Yezhou Yang. Covariate Shift Detection via Domain Interpolation Sensitivity. In First Workshop on Interpolation Regularizers and Beyond at NeurIPS 2022. https://openreview.net/pdf?id=YkPjTHZDdm NeurIPS 2022 Interpolation Workshop
- [W5] Kuldeep Kulkarni, Tejas Gokhale, Rajhans Singh, Pavan Turaga, Aswin C. Sankaranarayanan. Halluci-Net: Scene Completion by Exploiting Object Co-occurrence Relationships. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops. 2021. https://arxiv.org/abs/2004.08614
  CVPR 2021 AI for Content Creation Workshop
- [W6] Tejas Gokhale, Shailaja Sampat, Zhiyuan Fang, Yezhou Yang, and Chitta Baral. Cooking with blocks: A recipe for visual reasoning on image-pairs. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops, pp. 5-8. 2019. https://arxiv.org/abs/1905.12042
  CVPR 2019 Vision Meets Cognition Workshop

[W7] Tejas Gokhale. Vision beyond Pixels: Visual Reasoning via Blocksworld Abstractions. In IJCAI, pp. 6436-6437. 2019.

https://www.ijcai.org/Proceedings/2019/0907.pdf

IJCAI 2019 Doctoral Consortium

## **Technical Reports and Preprints**

- [P1] Shaswati Saha, <u>Sourajit Saha</u>, Manas Gaur, Tejas Gokhale. Side Effects of Erasing Concepts from Diffusion Models.
- [P2] Shivanand Kundargi, Kowshik Thopalli, Tejas Gokhale. Sequentially Acquiring Concept Knowledge to Guide Continual Learning.
- [P3] Ethan Wisdom, Tejas Gokhale, Chaowei Xiao, and Yezhou Yang. Mole Recruitment: Poisoning of Image Classifiers via Selective Batch Sampling. https://arxiv.org/abs/2303.17080
  Tech Report
- [P4] Tejas Gokhale, Hamid Palangi, Besmira Nushi, Vibhav Vineet, Eric Horvitz, Ece Kamar, Chitta Baral, and Yezhou Yang. Benchmarking Spatial Relationships in Text-to-Image Generation. 2022. https://arxiv.org/abs/2212.10015
  Tech Report
- [P5] Maitreya Patel, Neeraj Varshney, Agneet Chatterjee, Tejas Gokhale, Yezhou Yang, Chitta Baral. Reliability-Checklist: Framework for Comprehensively Evaluating the Reliability of NLP Systems. https://github.com/Maitreyapatel/reliability-checklist Tech Report

### **Books and Monographs**

[B1] Advances in Multimodal Information Retrieval and Generation Springer Synthesis Lectures on Computer Vision, ISBN: 978-3-031-57815-1 Man Luo, Tejas Gokhale, Neeraj Varshney, Yezhou Yang, Chitta Baral. [website]

#### Chapters:

- Man Luo, Tejas Gokhale, Neeraj Varshney, Yezhou Yang, and Chitta Baral. "Transformer-Driven Models for Language, Vision, and Multimodality." In Advances in Multimodal Information Retrieval and Generation, pp. 11-34. Cham: Springer International Publishing, 2024.
- Man Luo, Tejas Gokhale, Neeraj Varshney, Yezhou Yang, and Chitta Baral. "Multimodal Information Retrieval." In Advances in Multimodal Information Retrieval and Generation, pp. 35-91.
   Cham: Springer International Publishing, 2024.
- Man Luo, Tejas Gokhale, Neeraj Varshney, Yezhou Yang, and Chitta Baral. "Multimodal Content Generation." In Advances in Multimodal Information Retrieval and Generation, pp. 93-134. Cham: Springer International Publishing, 2024.
- Man Luo, Tejas Gokhale, Neeraj Varshney, Yezhou Yang, and Chitta Baral. "Retrieval Augmented Modeling." In Advances in Multimodal Information Retrieval and Generation, pp. 135-157. Cham: Springer International Publishing, 2024.

#### Ph.D. Dissertation

[T1] Tejas Gokhale. 2023. Towards Reliable Semantic Vision. Order No. 30426752, Arizona State University. https://www.proquest.com/docview/2813822780

#### Intellectual Property

- [IP1] Automated Evaluation of Spatial Relationships in Images [url] (US Patent App. 18/198,593)
- [IP2] Systems, Methods, and Apparatuses for Implementing Improved Diversity using Adversarially Learned Transformations for Domain Generalization [url] (US Patent App. 63/468,653)

Funding	DARPA SciFy (Scientific Feasibility) Program. "Modular Reasoning using Hybrid Inferential Formalisms"	(\$3.8M) 2024-27
	UMBC Center & Institute Departmentally-Engaged Research (CIDER). "Identification of Virga Precipitation Events"	(\$50K) 2025-26
	UMBC Cybersecurity Institute. Cybersecurity Graduate Fellows Program	(\$45K) 2025
	UMBC Strategic Awards for Research Transitions (START) "A Framework for Quantifying Typicality of AI-Generated Images"	(\$25K) 2024-25
	Maryland Procurement Office (via Johns Hopkins University) "Modular Natural Language Understanding" (PI: Frank Ferraro)	$(\sim \$30K)$ 2024
	UMBC Summer Research Faculty Fellowship (SURFF) "Improving the Continual Learning Ability of Visual Recognition System Unlearning"	(\$8K) ns via Targeted 2024
	Microsoft Research Accelerate Foundation Models Academic Research Cloud Computing and OpenAI Credits	(\$20K) 2024
	Google Cloud  Education Credits	$(\sim \$2.5K)$ 2023-24
Teaching	CMSC 898 Pre-Doctoral Candidacy Research Spring 2025, Fall 2025	2025, Fall 2024
	Graduate Teaching Associate, Arizona State University CSE310: Data Structures & Algorithms CSE408: Multimedia Information Systems CSE110: Introduction to Programming,	Spring 2020 Spring 2019 Fall 2018
	Guest Lecturer, Arizona State University CSE598, Perception in Robotics CSE408, Multimedia Information Systems	Spring 2022 Spring 2019
	Student Instructor, BITS Pilani Goa Campus CTE: Advanced Image Processing	Spring 2015
Presentations	(Invited Talk), UMBC COEIT Research Day "Cognitive Vision: Concepts, Contexts, and Semantics"	04/2025
	(Invited Talk), UMBC Information Systems Seminar "Cognitive Vision: Concepts, Contexts, and Semantics"	11/2024
	(Tutorial), European Conference on Computer Vision "Evaluation and Benchmarking for Text-to-Image Models"	10/2024
	(Lightning Talk), IARPA Video-LINCS Proposers Day	02/2024

"Robust Visual Understa	anding: Knowledge-Guided and M	Aultimodal Reason	ing"
,,,	nce on Applications of Computetion of Text-to-Image Models"	er Vision	01/2024 [website]
	nar, UMIACS (University of Manual of the Multimodal Era"	ryland)	11/2023
University of Maryland	echnology (02/23), Binghamton Baltimore County (03/23), India niversity (03/23), Colorado Scho	University (03/23) ana University (03/	23),
, , , , , , , , , , , , , , , , , , , ,	nce on Applications of Computering for Robustness Under Multi		01/2023 [website]
(Invited Talk) University of "Robust Semantic Vision"	_		10/2022
(Invited Talk) Microsoft R "Benchmarking Spatial I	esearch Relationships in Text-to-Image G	Teneration"	10/2022
(Doctoral Consortium) CV "Discovering Transforms	PR, New Orleans attions for Generalization in Sem	antic Vision"	06/2022
(Guest Lecture) Arizona S "Introduction to General	tate University CSE 598 "ization in Semantic Vision"		03/2022
(Invited Talk) Arizona Sta "Robust Visual Understa	_		09/2021
(Doctoral Consortium), IJe "Vision Beyond Pixels"	CAI, Macao		08/2019
,	morphic Cognition Engineering 's and Actions via Block-Play'	Workshop,	07/2019 [website]
	Technology and Science (BITS a Imaging and Computer Vision'	Pilani)	04/2018
<ul><li>Ziwei Zhang</li><li>Shivanand Kundargi UMBC Cyber Graduat</li></ul>	(M.S. UMBC)  ng Participation Scholarship, GSA Pro (M.S. USTC, China) (B.S. KLE, India)  e Fellow 2025, LLNL DSI Graduate S (M.S. UMBC) (M.S. Indiana) (M.S. Harvard) (M.S. ASU)	Ph.D. CS [curre Ph.D. CS [curre	t Grant nt], UMBC nt], UMBC nt], UMBC nt], UMBC nt], UMBC nt], UMBC
<ul> <li>PhD (as Committee M</li> <li>Sheng Cheng (advisor: Y</li> <li>Mark Jarzynski (advisor</li> <li>Yiran Luo (advisor: Chi</li> </ul>	Yezhou Yang) Ph.D	. CS 2025, ASU [d Ph.D. CS [curre Ph.D. CS [cur	nt], UMBC

Students

	• Naomi Angela Tack (advisor: Don Engel)	M.S. CS 2024, UMBC			
	<ul> <li>Other MS/PhD</li> <li>Independent Study: Neel Patel</li> <li>Independent Study: Shaswati Saha</li> <li>Independent Study: Varun Magotra</li> </ul>	Spring 2025, Fall 2024 Ph.D. CS [current], UMBC Spring 2024			
	<ul> <li>Undergraduate</li> <li>Independent Study: Nicholas Harrell</li> <li>Independent Study: Alexander Shaner</li> <li>Visitors: Tetevi Wilson, Dhanush Bharadwaj</li> <li>Visitors: Joey Mule, Luke Parrish</li> <li>UMBC CWIT Scholar: Chloe Wood</li> <li>UMBC CWIT Scholar: Danielle Burton</li> </ul>	Spring 2025 Spring 2025 2024-2025 2023-2024 2024-25 2023-24			
	<ul> <li>Ph.D. Mentees (at ASU)</li> <li>Maitreya Patel</li> <li>Agneet Chatterjee</li> <li>Nilay Yilmaz</li> </ul>	Ph.D. CS [current], ASU Ph.D. CS [current], ASU Ph.D. CS [current], ASU			
	<ul> <li>MS (Thesis) Mentees (at ASU)</li> <li>Maitreya Patel (see publication [C12])</li> <li>Abhishek Chaudhary (see publication [C13])</li> </ul>	M.S. CS 2022, ASU [thesis] M.S. CS 2021, ASU [thesis]			
	<ul> <li>Undergraduate Mentees (at ASU)</li> <li>ASU FURI Program: Mertay Dayanc</li> <li>BS CS Capstone Project: Paul Butler, Jace Lord, Aast William Tith</li> </ul>	B.S CS, 2020 hwin Ranjan, Sagarika Pannase, 2019-20			
Academic Service	<ul> <li>National Science Foundation</li> <li>Reviewer, GRFP</li> <li>Panel, IIS/III</li> </ul>	2025 2025			
	<b>Tutorial Chair</b> , International Conference on Computer Vision (ICCV) 2025				
<ul> <li>Area Chair / Action Editor</li> <li>International Conference on Computer Vision (ICCV)</li> <li>Advances in Neural Information Processing Systems (NeurIPS)</li> <li>Winter Applications of Computer Vision (WACV)</li> <li>Association for Computational Linguistics (ACL)</li> <li>North American Chapter of the ACL (NAACL)</li> <li>Empirical Methods in Natural Language Processing (EMNLP)</li> </ul>		NeurIPS) 2024-25 2025-2026 2024 2024			
	Session Chair  • Winter Applications of Computer Vision (WACV)	2025			

MS Thesis (as Committee Member)

#### Reviewer / Program Committee: • Conference on Computer Vision and Pattern Recognition (CVPR) 2023-25 • International Conference on Computer Vision (ICCV) 2023 • European Conference on Computer Vision (ECCV) 2022 - 24• Winter Conference on Applications of Computer Vision (WACV) 2021 - 24• International Conference on Machine Learning (ICML) 2023 - 25• Advances in Neural Information Processing Systems (NeurIPS) 2022 - 24• International Conference on Learning Representations (ICLR) 2022 - 25• AAAI Conference on Artificial Intelligence (AAAI) 2021 - 24• Conference on Language Models (COLM) 2024 • Association for Computational Linguistics (ACL) 2021 - 24• Empirical Methods in Natural Language Processing (EMNLP) 2021 - 23• North American Chapter of the ACL (NAACL) 2021 - 23• ACM Multimedia 2025 • International Conference on Robotics and Automation (ICRA) 2019-2023 • International Conference on Intelligent Robots and Systems (IROS) 2022 • IEEE Robotics and Automation Letter (RA-L) 2020-24 • IEEE Transactions of Pattern Analysis and Machine Intelligence (T-PAMI) 2024-25 • ACM Transactions of Computing for Healthcare 2024 • ACM Computing Surveys 2024 • Springer Machine Vision and Applications (MVAP) 2020 • Springer Book Proposals Reviewer 2024 • Mentor, Undergraduate Student Consortium (AAAI-UC) **AAAI 2024** • Best Student Abstract Award Committee, AAAI 2024 Leadership: • Director, Cognitive Vision Group **UMBC** • Team Lead, Summer Camp for Applied Language Exploration (SCALE) 2024, JHU Human Language Technology Center of Excellence [Website] Summer 2024 • Organizer, Tutorial on Responsibly Building Generative Models [Website] ECCV'24 • Organizer, Tutorial on Reliability of Generative Models in Vision [Website] WACV'24 • Organizer, Workshop on Open-Domain Reasoning under Multi-Modal Settings (ODRUM), [Website] [YouTube] CVPR'23 • Organizer, Workshop on Open-Domain Retrieval under Multi-Modal Settings (ODRUM), [Website] [YouTube] CVPR'22 • Organizer, Tutorial on Semantic Data Engineering under Multimodal Settings (SERUM) [Website] WACV'23 • Organizer, 2021 Frontiers of V&L Seminar Series, [Website], [YouTube] ASU

#### Misc:

• Lead Vocalist, CVPR House Band

2024, 2025

University	University Service (at UMBC):	
SERVICE	• UMBC HPCF Governance, Subcommittee for CHIP-GPU	2025-present
	• Course Development, CMSC 475/675: Neural Networks	[Website]
	• Course Development, CMSC 491/691: Robust Machine Learning	[Website]
	• Course Development, CMSC 472/672: Computer Vision	[Website]
	• Regular Graduate Course Proposal, CMSC 672: Computer Vision	Approved
	• Regular Undergraduate Course Proposal, CMSC 472: Computer Visi	on Approved
	• PPR Seminar: Advances in Perception, Prediction, and Reasoning	[Website]
	• Graduate Admissions Committee	2023-present
	• Department Publicity Committee	2023-present
	• Faculty Mentor, Center for Women in Technology	2023-present
	• Undergraduate Student Advisor	2023-present
	• Faculty Learning Community, UMBC Faculty Development Center	2024-25
	• Faculty Mentor, UMBC IEEE + Tau Beta Pi Open Lab	Fall 2024
	• Faculty Volunteer, COEIT Ph.D. Open House	2025, 2024
	•	ll 2023, Fall 2024
	• Reviewer, CSEE Research Day	Spring 2024
	• Reviewer, UMBC ORCA Internal Grants	2025
	Reviewer, COEIT Student Summer Projects  OCTION COLUMN TO THE PROJECT STREET STREET TO THE PROJECT STREET STREET STREET TO THE PROJECT STREET ST	Summer 2025
	• Reviewer, COEIT Cybersecurity Research and Education Proposals	Fall 2024
	• Interviewer, CSEE Faculty Candidates	2024, 2025
	Interviewer, COEIT Staff Searches     Manyland Asian Angeliand Frankling Staff Council	2025
	• Member, Asian and Asian American Faculty Staff Council	2023-present
	University Service (at ASU):	
	• Founder, Summer Vision Reading Group, ASU	[Website]
	• Course Development, CSE591: Frontier Topics in Vision & Language [website] Spring 2021, ASU	[YouTube]
	• Volunteer, 2019 Southwest Robotics Symposium,	Tempe AZ
	• Volunteer, International Conference on Machine Learning 2020,	Virtual
	• Founding Advisor, ASU Machine Learning Club,	ASU
	<ul> <li>Award Reviewer, GPSA Teaching Award Reviewer</li> </ul>	ASU
	• Mentor, Graduate Student Mentorship Program,	ASU
	• Project Mentor, CSE598 - Perception in Robotics, ASU	Spring 2022
	• Project Mentor, CSE576 - Natural Language Processing, ASU	Fall 2018
Awards	CVPR 2024 VDU Workshop, Best Paper Award	2024
11,,,,,,,,	Research Excellence Award, ASU GPSA	2022
	Outstanding Mentor Award, ASU GPSA	2022
	NeurIPS Top Reviewer	NeurIPS 2022
	CVPR 2022 Doctoral Consortium	CVPR 2022
	ICLR Best Reviewer	ICLR 2022
		2022, 2021, 2020
	Engineering Graduate Fellowship, (ASU Engineering)	2023, 2020

10/11

for WACV 2023 WACV'23, CVPR'22

IJCAI 2019

CMU, 2017

ICCV'21, EMNLP'20, ECCV'20

ASU GPSA Travel Award

IJCAI 2019 Doctoral Consortium

Graduate College Travel Award (declined) Graduate College Travel Award (accepted)

Inducted, IEEE Eta Kappa Nu, Sigma Chapter

National Talent Scholarship, National Council of Educational Research and Training (Govt. of India) 2007 - 2015Media UMBC team leads research into AI tools that can assess the feasibility of scientific claims UMBC News 04/2025Alum inspires next generation of computer vision researchers ASU Full Circle 10/2024 Frontiers of multimodal learning: A responsible AI approach Microsoft Research Blog 09/2023 CASC research in ML robustness debuts at AAAI conference News and Press, LLNL Computing 02/2021HuggingFace and Intel release a solution for high-fidelity text and image consistency NetEase (163.com), China 04/2024References Available upon request