Ram Ramrakhya

Education	Georgia Institute of Technology , Atlanta, GA <i>Ph.D. in Computer Science</i> Advised by Dhruv Batra and Zsolt Kira	Aug 2023 - Present	
	Georgia Institute of Technology , Atlanta, GA <i>M.S. in Computer Science</i> Advised by Dhruv Batra and Abhishek Das	Aug 2021 - May 2023	
	Pune Institute of Computer Technology , Pune, India Bachelor of Engineering in Information Technology	Aug 2015 - May 2018	
Internships	Allen Institute of AI (AI2), Seattle, WA Research Intern with Luca Weihs, Kuo-Hao Zeng, and Aniruddha Kembhavi Built methods for tidying robots that can reason about object placement ba common-sense reasoning in indoor environments.	May 2023 - Aug 2023 sed on visual-context and	
	Mitsubishi Electric and Research Laboratories, Boston, MA Resarch Intern with Anoop Cherian Worked on indoor semantic navigation using scene graph representations for end-t	May 2022 - Aug 2022 o-end learning.	
	Machine Learning and Perception Lab, GT, Atlanta, GA Research Intern with Dhruv Batra, and Abhishek Das Built Habitat-Web, infrastructure to collect human demonstrations for embodied t Used it to scale training of indoor semantic navigation agents using IL and RL fine	April 2020 - July 2021 asks at scale. etuning.	
Awards	Georgia Tech Rising Star Doctoral Student Research Award (1 student fro Georgia Tech CoC Outstanding MS Researcher (1 student from the College) Runner up at Habitat Navigation Challenge	udent from the College) 2023 College) 2022 2021, 2022	
Conference Publications	[C5] Seeing the Unseen: Visual Common Sense for Semantic Placement R. Ramrakhya, A. Kembhavi, D. Batra, Z. Kira, K. Zeng*, L. Weihs* <i>IEEE Computer Vision and Patter Recognition (CVPR)</i> , 2024	t	
	 [C4] GOAT-Bench: A Benchmark for Multi-Modal Lifelong Navigation M. Khanna*, R. Ramrakhya*, G. Chhablani, S. Yenamandra, T. Gervet, M. Chang, Z. Kira, D. Chaplot, D. Batra, R. Mottaghi <i>IEEE Computer Vision and Patter Recognition (CVPR), 2024</i> 		
	[C3] PIRLNav: Pretraining with Imitation and RL Finetuning for ObjectNav R. Ramrakhya, D. Batra, E. Wijmans, A. Das IEEE Computer Vision and Patter Recognition (CVPR), 2023		
	 [C2] Habitat-Matterport 3D Semantics Dataset K. Yadav*, R, Ramrakhya*, S. Ramakrishnan*, T. Gervet, J. Turner, A. Gokaslan, N. Maestre, A. Chang, D. Batra, M. Savva, A. Clegg, D. Chaplot <i>IEEE Computer Vision and Patter Recognition (CVPR), 2023</i> 		
	 [C1] Habitat-Web: Learning Embodied Object-Search Strategies from I Demonstrations at Scale R. Ramrakhya, E. Undersander, D. Batra, A. Das IEEE Computer Vision and Patter Recognition (CVPR), 2022 	Human	
Workshop Papers	[W4] Curriculum Learning via Task Selection for Embodied Navigation R. Ramrakhya, D. Batra, A. Kembhavi, L. Weihs Embodied AI Workshop, CVPR 2023		
	[W3] PIRLNav: Pretraining with Imitation and RL Finetuning for ObjectNav R. Ramrakhya, D. Batra, E. Wijmans, A. Das Reincarnating Reinforcement Learning Workshop, ICLR 2023		
	[W2] Offline Visual Representation Learning for Embodied Navigation		

	K. Yadav, R. Ramrakhya , A. Majumdar, V. Berges, S. Kuhar, D. Batra, A. Baevski, O. Reincarnating Reinforcement Learning Workshop, ICLR 2023	Makysmets
	 [W1] Habitat-Web: Learning Embodied Object-Search Strategies from Human Demonstrations at Scale R. Ramrakhya, E. Undersander, D. Batra, A. Das Embodied AI Workshop (CVPR 2022), Overlooked Aspects of IL Workshop (RSS 2022) 	
Preprint	[P1] OVRL-v2: Semantic Navigation without Semantic Mapping or Detection K. Yadav*, A. Majumdar*, R. Ramrakhya, A. Baevski, Z. Kira, O. Makysmets, D. Batra arXiv preprint arXiv:2303.07798, 2023	
Invited Talks	Habitat-Web: Embodied Object-Search Strategies from Human Demonstrats at Scale Overlooked Aspects of IL Workshop at RSS Jun	
	Seeing the Unseen: Visual Common Sense for Semantic Placement University of Washington RAVIN AI/ML Seminar	Jan 2024
Work Experience	Glance, Bangalore, KAJun 2018 - Jul 2021Software Development Engineer 2Built a content creation platform from scratch, built content extraction from web using heuristic based crawlers, and used image captioning models to automated content filtering at scale. The tool helps streamline creation of $\sim 10,000$ glance stories and saves ~ 150 hours of manual effort by each content designer monthly. Worked on optimizing large-scale data pipelines and content serving infrastructure, that serves 150 million users and ingests 10TB data every day to save $\sim 20k$ \$ in monthly infrastructure cost.	
	CloudCV, Atlanta, GA Jan 202 Open Source Organization Lead Led a team of 15+ collaborators to work on EvalAI, an open-source platform to create and partic challenges. Collaborated closely with 30+ organizations including Meta, Google, Amazon, etc to AI challenges for top tier AI conferences.	21 - Jul 2022 cipate in AI o host 200 +
Side Projects	Eval.AI [github.com/Cloud-CV/EvalAI] Platform to create, collaborate and participate in the AI Challenges organized around the globe.	2020-2022
	Fabrik [github.com/Cloud-CV/Fabrik] Collaborative platform to build, visualize and train deep learning models via a simple drag-and-dr	2018-2020 op interface.
Professional	Workshop Organization 5 th EmbodiedAI Workshop at CVPR Vision and Language Algorithmic Reasoning Workshop at ICCV	2024 2023
	Challenge Organization HomeRobot: Open Vocabulary Mobile Manipulation (OVMM) Challenge at NeurIPS Habitat Navigation Challenge 2023 at Embodied AI Workshop, CVPR Habitat Navigation Challenge 2023 at Embodied AI Workshop, CVPR	2023 2023 2022
	Reviewing International Conference on Machine Learning (ICML) International Conference on Learning Representations (ICLR) Neural Information Processing Systems (NeurIPS) IEEE Robotics and Automation Letters (RA-L)	2024 2023 2023 2023
	Advising Gunjan Chhablani (MS Georgia Tech); Publication [C4] Archana Kutumbaka (MS Georgia Tech) Google Summer of Code (7 mentors) Google Summer of Code (9 undergraduate students) Google Code-In (15 high-school students)	2023 2023 2021 2019-2021 2018-2019