SONIA RAYCHAUDHURI

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SUMMARY

I am a PhD student in Computer Science at the GrUVi Lab, in Simon Fraser University, advised by Dr. Angel Chang. I am broadly interested in grounding language in 3D environments. More specifically, I am working to build Embodied AI agents capable of following instructions in human language to navigate in 3D indoor environments.

Earlier I graduated with a B.E. degree in Engineering from IIEST and thereafter worked with TCS and Ericsson as a Software Engineer, before deciding to pursue research in AI.

Keywords	Embodied agents, vision and language navigation, object navigation, multi-object navigation, reinforcement learning, robotic vision

Education	Simon Fraser University
	  Ph.D., Computer Science (2020-2024)
	
	IIEST, Shibpur, India
	  Bachelor of Engineering, Information Technology (2003-2007)

Teaching Experience	Graduate Teaching Assistant
	  Natural Language Processing, Fall 2021
	
	Graduate Teaching Assistant
	  Grounded Natural Language Understanding, Spring 2021
	
	Graduate Teaching Assistant
	  Natural Language Processing course, Fall 2020

Publications	Language-Aligned Waypoint (LAW) Supervision for Vision-and-Language Navigation in Continuous Environments. S. Raychaudhuri, S. Wani, S. Patel, U. Jain, A. Chang. EMNLP 2021. [project] Motion Annotation Programs: A Scalable Approach to Annotating Kinematic Articulations in Large 3D Shape Collections. X. Xu, D. Charatan, S. Raychaudhuri, H. Jiang, M. Heitmann, V. Kim, S. Chaudhuri, M. Savva, A. Chang, and D. Ritchie. 3DV 2020. [project]

Industry Experience	Ericsson India Global Services Pvt. Ltd Senior Software Engineer (2011 – 2019) Tata Consultancy Services Pvt. Ltd. Software Engineer (2007 – 2011)
Academic Service / Peer Review	**Organizing Workshops** Hosted MultiON challenge for Embodied AI Workshop at CVPR 2022, 2023 **Reviewing for International Conferences** International Conference on Intelligent Robots and Systems (IROS 2022) IEEE International Conference on Robotics and Automation (ICRA 2023) **Organizing Student-led Groups** Embodied-AI Reading Group at SFU in Spring 2022 Mentoring Graduate students as part of the Women in Computer Science (WiCS)
Awards / Recognition	• Awarded Outstanding TA Award by the School of Computing Science for 2022 • Amii AI Week Talent Bursary Recipient, 2022 [webpage] • Selected for CRA-WP Grad Cohort for Women, 2022 [webpage] • Graduate Fellowship, SFU, 2022 • Selected for CRA-WP Grad Cohort for Women, 2021 [webpage] • Helmut & Hugo Eppich Family Graduate Scholarship, SFU, 2021 • Computing Science Graduate Fellowship, SFU, 2021 • Graduate Fellowship, SFU, 2021 • Graduate Fellowship, SFU, 2019