

# Arun Balajee Vasudevan

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CONTACT	220 Stotler Road	Contact: <a href="mailto:arunbalv@andrew.cmu.edu">arunbalv@andrew.cmu.edu</a>
ADDRESS	15235 Pittsburgh, PA	
INTERESTS	Computer Vision, Language and Sounds, Motion Planning, 4D Reconstruction	
EDUCATION	<b>Carnegie Mellon University</b> Postdoc under Prof. Deva Ramanan	<b>Apr 2022- Present</b>
	<b>ETH Zurich</b> PhD in Computer Vision, Advised by Prof. Luc Van Gool	<b>Oct 2016 - Sept 2021</b>
	<b>Ecole Polytechnique Federale de Lausanne (EPFL)</b> Master in Computer Science	<b>Sept 2014 - Aug 2016</b> CGPA: 5.45/6.0
	<b>Indian Institute of Technology Jodhpur (IITJ)</b> B.Tech. in Electrical Engineering	<b>July 2010 - May 2014</b> CGPA: 9.34/10.0
ONGOING WORK	SplatGym: Reconstruction of Dynamic Urban Scenes and Simulation of Actors	
SELECTED PUBLICATIONS	<i>Planning with Adaptive World Models for Autonomous Driving</i> Arun Balajee Vasudevan, Neehar Peri, Jeff Schneider, Deva Ramanan	<b>ArXiv 2024</b>
	<i>LCA-on-the-Line: Benchmarking Out of Distribution Generalization with Class Taxonomies</i> Jia Shi, Gautam Gare, ..., Arun Balajee Vasudevan, ..., Deva Ramanan [ <b>Oral</b> ]	<b>ICML 2024</b>
	<i>The Un-Kidnappable Robot: Acoustic Localization of Sneaking People</i> Mengyu Y, Patrick G, Samarth B, Arun Balajee Vasudevan, Charles K, James Hays.	<b>ICRA 2024</b>
	<i>Sound and Visual Representation Learning with Multiple Pretraining Tasks</i> Arun Balajee Vasudevan, Dengxin Dai, Luc Van Gool.	<b>CVPR 2022</b>
	<i>Semantic Object Prediction and Spatial Sound Super-Resolution with Binaural Sounds</i> Arun Balajee Vasudevan, Dengxin Dai, Luc Van Gool. [ <b>Spotlight</b> ]	<b>ECCV 2020</b>
	<i>Talk2Nav: Long-Range Vision-and-Language Navigation with Dual Attention and Spatial Memory</i> Arun Balajee Vasudevan, Dengxin Dai, Luc Van Gool.	<b>IJCV 2020</b>
INVITED TALKS	Multimodal Perception and Navigation in Outdoor scenes, IBM Accelerated Discovery Seminar, <b>IBM Zurich</b> , Switzerland, <b>February 2023</b>	
	Semantic Understanding of Outdoor Scenes with Binaural Sounds, EE Seminar series, <b>IIT Gandhinagar</b> , India, <b>October 2021</b>	
PATENTS	System and method for navigating a vehicle using language instructions Wim Abbeloos, Dengxin Dai, Arun Balajee Vasudevan, Luc Van Gool [ <b>Granted</b> ]	<b>Feb 2024</b>
	A method for training a neural network to describe an environment on the basis of an audio signal Wim Abbeloos, Arun Balajee Vasudevan, Dengxin Dai, Luc Van Gool [ <b>Published</b> ]	<b>Feb 2023</b>
INTERNSHIPS	<b>Research Intern, Argo AI</b> Motion Planning datasets and Data-driven Simulators	<b>Apr 2022 – Nov 2022</b>
	<b>Research Intern, Adobe</b> Comparative Image aesthetics captioning	<b>Apr 2021 – June 2021</b>