

Aditya Ganeshan

GRADUATE STUDENT, BROWN UNIVERSITY

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EDUCATION	Brown University, US August 2021 - present <i>Doctor of Philosophy, Computer Science</i> Thesis: <i>Domain-Agnostic Tooling for Symbolic Geometry</i>
	Indian Institute of Technology, Roorkee, India August 2012 - July 2017 <i>Integrated Master of Science, Applied Mathematics</i> Thesis: <i>Per-pixel feedback for improving semantic segmentation</i>
PROFESSIONAL EXPERIENCE	Research Scientist Intern June 2025 - September 2025 <i>Adobe, San Francisco</i> Mentor/Manager: Thibault Groueix & Yifan Wang
	Visiting Associate Researcher December 2024 - February 2025 <i>Igarashi Lab, University of Tokyo, Japan</i> Mentors: Maria Larsson & Takeo Igarashi
	Research Scientist Intern June 2024 - September 2024 <i>Adobe, San Francisco</i> Mentor/Manager: Matthew Fisher
	Researcher December 2018 - May 2021 <i>Preferred Networks Inc., Tokyo, Japan</i> Manager: Shin-Ichi Maeda
	Research Assistant June 2017 - November 2018 <i>Video Analytics Lab, Indian Institute of Science,</i> Mentor/Manager: R V Babu
SCHOLARSHIPS & AWARDS & HONORS	<i>Outstanding Reviewer (top 5%), CVPR 2025</i> June 2025
	<i>Outstanding Reviewer (top 8%), NeurIPS 2022</i> June 2022
	<i>Highlighted Reviewer (top 8%), ICLR 2022</i> April 2022
	<i>Winner, Deep Perception Hackathon, Machine Learning Tokyo, Japan</i> September 2019
	<i>Winner, AutoNUE: Scene Understanding Challenge, ECCV, Germany</i> September 2018 <i>INSPIRE Scholarship, Indian Institute of Technology, Roorkee, India</i> 2012 - 2017
PUBLICATIONS	<i>Residual Primitive Fitting of 3D Shapes with SuperFrusta,</i> CVPR' 26, A Ganeshan , M. Gadelha, T. Groueix, Z. Chen, S. Chaudhuri, V. Kim, W. Yifan, D Ritchie.
	<i>Migumi: Making Tightly Coupled Integral Joints Millable,</i> SIGGRAPH Asia'25, A Ganeshan , K Fleischer, W Jakob, A Shamir, D Ritchie, T Igarashi, M Larsson.
	<i>Procedural Scene Programs for Open-Universe Scene Generation,</i> SIGGRAPH Asia'25, M Gumin, ..., A Ganeshan , ..., S Morris, D Ritchie.
	<i>Pattern Analogies: Learning to Perform Programmatic Image Edits by Analogy,</i> CVPR'25, A Ganeshan , T Groueix, P Guerrero, R Mèch, M Fisher, D Ritchie.
	<i>ParSEL: Parameterized Shape Editing with Language,</i> SIGGRAPH Asia'24, A Ganeshan , R Y Huang, X Xu, R K Jones, D Ritchie.
	<i>Learning to Edit Visual Programs with Self-Supervision,</i> NeurIPS'24, R K Jones, R Zhang, A Ganeshan , D Ritchie.
	<i>Improving Unsupervised Visual Program Inference with Code Rewriting Families,</i> ICCV'23 (Oral - 1.8%), A Ganeshan , R K Jones, D Ritchie.
	<i>Skill Generalization with Verbs,</i> IROS'23, R Ma, ..., A Ganeshan , ..., S Tellex, G Konidaris.
	<i>Warp-Refine Propagation: Semi-Supervised Auto-labeling via Cycle-consistency,</i> ICCV'21, A Ganeshan , A Vallet, Y Kudo, S I. Maeda, T Kerola, R Amrbrug, D Park, A Gaidon.
	<i>Visual Representations of Fingers for Precise Touch Input when using a Phone in VR,</i> CHI'21, F Matulic, A Ganeshan , H Fujiwara, D Vogel.

Meta-learning Extractors for Music Source Separation,
ICASSP'20, D Samuel, **A Ganeshan**, J Naradowsky.

FDA: Feature Disruptive Attack,
ICCV'19, **A Ganeshan**, B S Vivek, R V Babu.

iSPA-Net: Iterative Semantic Pose Alignment Network,
ACMMM'18, J N Kundu*, **A Ganeshan***, R M Venkatesh*, A Prakash, R V Babu.

Generalizable data-free objective for crafting universal adversarial perturbations,
TPAMI'18, M K Reddy*, **A Ganeshan***, R V Babu.

Object Pose Estimation from Monocular Image using Multi-View Keypoint Correspondence,
(ECCV '18) "Geometry Meets Deep Learning" Workshop 2018,
J N Kundu*, R M Venkatesh*, **A Ganeshan***, R V Babu.

Creating Language-driven Spatial Variations of Icon Images,
Arxiv 2024, X Xu, **A Ganeshan**, K D D Willis, Y Pu, D Ritchie.

WORKSHOP
PAPERS

PRE-PRINTS

TEACHING EXPERIENCE	CSCI 2240: Advanced Computer Graphics, Brown University, Providence <i>Graduate Teaching Assistant with Professor Daniel Ritchie.</i>	Spring 2023
	DS-265: Deep Learning for Computer Vision, IISc, India <i>Teaching Assistant with Professor R V Babu.</i>	Spring 2018
REVIEWING	<i>CVPR, SIGGRAPH, CG Forum, EuroGraphics, SIGGRAPH Asia</i>	2024-2025
	<i>CVPR, ECCV, SIGGRAPH, SIGGRAPH Asia</i>	2023-2024
	<i>IROS, CVPR, ICCV, NeurIPS,</i>	2022-2023
	<i>ICCV, ICML, ICLR, CVPR, NeurIPS,</i>	2021-2022
	<i>AAAI, NeurIPS, ECCV, CVPR</i>	2019-2020
SERVICE	Open Review Chair	2025-2026
	<i>3DV 2026, Vancouver, Canada</i>	
	Volunteer	August 2023
	<i>SIGGRAPH 2023, LA, US</i>	
	Student Mentor	Feb 2023 - May 2023
	<i>ExploreCSR, Brown University, US</i>	
	Study Group Leader (REU Site)	June 2022 - July 2022
	<i>AI for computational creativity, Brown University, US</i>	
	Head Volunteer	June 2022
	<i>RLDM 2022, Brown University, US</i>	
	General Secretary,	May 2015 - May 2016
	<i>Music Section, IIT Roorkee, India</i>	
OTHER PROJECTS	GeoLIPI	Spring 2024
	<i>A DSL for 2D/3D Implicit Geometric Modelling in python.</i>	
	SySL	Fall 2025
	<i>Symbolic Scene Language for creating sphere-trace-able scenes in GLSL.</i>	
	ASMBLR	Fall 2025
	<i>A node based visual programming interface to assemble Geolipi and SySL expressions.</i>	
	PolyArc CSG	Spring 2025
	<i>Exact SDF, Correct Morphological operations for 2D CSG Expressions.</i>	
	Branching BAD	spring 2023
	<i>Branching many world Bootstrapped Abstraction Discovery from scratch.</i>	
	A Special Place in Hell	May 2018
	<i>A casual projectile-shooting game with a morbid sense of humour.</i>	
	DRL in CV	2017-2018
	<i>A course on using Deep RL in computer vision.</i>	
	Defense against the dark arts	May 2018
	<i>Evaluation of defense mechanisms against UAP generation algorithms.</i>	
