Aditya Ganeshan

INCOMING CS PhD, BROWN UNIVERSITY, US

Education	Brown University, US Doctor of Philosophy, Computer Science,	August 2021 onwards
	Indian Institute of Technology, Roorkee, India Integrated Master of Science, Applied Mathematics, Thesis: Per-pixel feedback for improving semantic segmentation	August 2012 - July 2017
Professional	Researcher	
EXPERIENCE		December 2018 - May 2021
	Research Assistant Video Analytics Lab, Indian Institute of Science	2017 - November 2018
Scholarships & Awards	Winner, Deep Perception Hackathon, Machine Learning Tokyo Winner, AutoNUE: Scene Understanding Challenge, ECCV, Germany INSPIRE Scholarship, Indian Institute of Technology, Roorkee	September 2019 September 2018 August 2012 - July 2017
Teaching Experience	DS-265: Deep Learning for Computer Vision Teaching Assistant with Professor Venkatesh R. Babu	June 2017 - March 2018
Reviewing	 ICCV 2021: International Conference on Computer Vision ICML 2021: International Conference on Machine Learning CVPR 2021: Computer Vision and Pattern Recognition NeurIPS 2020: Neural Information Processing Systems ECCV 2020: European Conference on Computer Vision AAAI 2020: AAAI Conference on Artificial Intelligence 	May 2021 February 2021 December 2020 July 2020 March 2020 December 2019
Intern Advising	Quang Nguyen: Improved one-shot model for Multiple Object Tracking David Samuel: Meta-learning Extractors for Music Source Separation.	Summer 2020 Summer 2019
Paper Under Review	A. Ganeshan, A. Vallet, Y. Kudo, S. I. Maeda, T. Kerola, R. Ambrus Improving Semantic Segmentation via Cycle-consistent Video Auto-labe	
JOURNAL	M.K. Reddy*, A. Ganeshan*, R. V. Babu,	

 $Generalizable\ data-free\ objective\ for\ crafting\ universal\ adversarial\ perturbations.$

(TPAMI'18) IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018.

ARTICLE

^{*} equal contribution

Conference Publications

F. Matulic, A. Ganeshan, H. Fujiwara, D. Vogel,

Phonetroller: Visual Representations of Fingers for Precise Touch Input when using a Phone in VR. (CHI'21) ACM CHI Conference on Human Factors in Computing Systems 2021.

D. Samuel, A. Ganeshan, J. Naradowsky

Meta-learning Extractors for Music Source Separation.

(ICASSP'20) International Conference on Acoustics, Speech and Signal Processing 2020.

A. Ganeshan, B. S. Vivek, R. V. Babu,

FDA: Feature Disruptive Attack.

(ICCV'19) International Conference on Computer Vision, 2019.

J. N. Kundu*, A. Ganeshan*, R. M Venkatesh*, A. Prakash, R. V. Babu,

iSPA-Net: Iterative Semantic Pose Alignment Network.

(ACMMM'18) ACM International Conference on Multimedia 2018.

Workshop Papers

J.N. Kundu*, R. M Venkatesh*, A. Ganeshan*, R. V. Babu,

Object Pose Estimation from Monocular Image using Multi-View Keypoint Correspondence.

(ECCV-W'18) "Geometry Meets Deep Learning" Workshop 2018.

DISSERTATION

A. Ganeshan,

Per-Pixel Feedback for improving Semantic Segmentation.

Master's Dissertation, Indian Institute of Technology, Roorkee, 2017.

SERVICE

Member of Global Internship Committee

Preferred Networks Inc, Japan

May 2019 - November 2020

General Secretary,

Music Section, IIT Roorkee

May 2015 - May 2016

Finance Coordinator,

Watch Out! News Agency, IIT Roorkee

August 2012 - August 2015

Side

A Special Place in Hell

Projects

A casual projectile-shooting game with a morbid sense of humour.

DRL in CV

A personally curated course in Deep RL in computer vision.

GITHUB

$flying_furniture$

PROJECTS

Code for creating *The Flying Furniture* dataset.

 $render_wt_pt_proj$

Code for Rendering with blender, and 3D keypoints to 2D projection.

universal_pytorch

Batch implementation of *DeepFool*, and *Universal Adversarial Perturbations* on pytorch.

 $defence_against_the_dark_arts$

Evaluation of various defense mechanisms against various UAP generation algorithms.

 $multi_arm_bandit$

Extensible multi-arm-bandit environment implementation for OpenAI Gym.

^{*} equal contribution