

Aditya Ganeshan

RESEARCHER, PREFERRED NETWORKS INC., TOKYO, JAPAN

EDUCATION	Indian Institute of Technology, Roorkee, India <i>Integrated Master of Science, Applied Mathematics,</i> Thesis Title: <i>Per-pixel feedback for improving semantic segmentation</i> Best Master's Dissertation Project: 10/10	August 2012 - July 2017
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PROFESSIONAL EXPERIENCE	Researcher <i>Preferred Networks, Inc., Japan</i>	December 2018 - <i>Present</i>
	Research Assistant <i>Video Analytics Lab, Indian Institute of Science</i>	2017 - November 2018

SCHOLARSHIPS & AWARDS	<i>Winner, Deep Perception Hackathon, Machine Learning Tokyo</i>	September 2019
	<i>Winner, AutoNUE: Scene Understanding Challenge, ECCV, Germany</i>	September 2018
	<i>INSPIRE Scholarship, Indian Institute of Technology, Roorkee</i>	August 2012 - July 2017

TEACHING EXPERIENCE	<i>DS-265: Deep Learning for Computer Vision</i> <i>Teaching Assistant with Professor Venkatesh R. Babu</i>	June 2017 - March 2018
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REVIEWING	<i>NeurIPS 2020: Neural Information Processing Systems</i>	July 2020
	<i>ECCV 2020: European Conference on Computer Vision</i>	March 2020
	<i>AAAI 2020: AAAI Conference on Artificial Intelligence</i>	December 2019

INTERN ADVISING	<i>Quang Nguyen: Improved one-shot model for Multiple Object Tracking</i>	Summer 2020
	<i>David Samuel: Meta-learning Extractors for Music Source Separation.</i>	Summer 2019

JOURNAL ARTICLE	M.K. Reddy*, A. Ganeshan* , R. V. Babu, <i>Generalizable data-free objective for crafting universal adversarial perturbations.</i> (TPAMI'18) <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2018.
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CONFERENCE PUBLICATIONS	D. Samuel, A. Ganeshan , J. Naradowsky <i>Meta-learning Extractors for Music Source Separation.</i> (ICASSP'20) <i>International Conference on Acoustics, Speech and Signal Processing 2020.</i>
	A. Ganeshan , B. S. Vivek, R. V. Babu, <i>FDA: Feature Disruptive Attack.</i> (ICCV'19) <i>International Conference on Computer Vision</i> , 2019.

* equal contribution

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 Techonology, Roorkee, 2017.

POSITION OF RESPONSIBILITY **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 PROJECTS **A Special Place in Hell**
 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 CODE **flying_furniture**
 Code for creating *The Flying Furniture* dataset.
render_wt_pt_proj
 Code for Rendering with blender, and 3D keypoints to 2D projection.
seg_metrics_pytorch
 GPU Based Segmentation Metric evaluation in *pytorch*, for *PASCAL VOC'2012*.
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*.
pytorch_deeplab_large_fov
 Implementation of *Deeplab Large FOV* for semantic segmentation on *pytorch*.

* equal contribution