

Nirbhay Modhe

CONTACT	PhD Candidate, advised by Prof. Dhruv Batra College of Computing, Georgia Tech	Homepage: nirbhayjm.github.io
EDUCATION	Georgia Tech , PhD in Computer Science IIT Kanpur , B. Tech in Computer Science, CGPA: 9.7/10	2017-present 2013-2017
PUBLICATIONS	Nirbhay Modhe , Harish Kamath, Dhruv Batra, Ashwin Kalyan. Model-Advantage Optimization for Model-Based Reinforcement Learning <i>pre-print, under review</i> (arXiv ↗) Nirbhay Modhe* , Harish Kamath*, Dhruv Batra, Ashwin Kalyan. Bridging Worlds in Reinforcement Learning with Model-Advantage <i>4th Lifelong Machine Learning Workshop at ICML 2020</i> (PDF ↗) Nirbhay Modhe , Prithvijit Chattopadhyay, Mohit Sharma, Abhishek Das, Devi Parikh, Dhruv Batra, Ramakrishna Vedantam. IR-VIC: Unsupervised Discovery of Sub-goals for Transfer in RL <i>International Joint Conference on Artificial Intelligence, Yokohoma, Japan, 2020</i> (IJCAI20 ↗ , arXiv ↗) Vikas Jain*, Nirbhay Modhe* , Piyush Rai. Scalable Generative Models for Multi-label Learning with Missing Labels. <i>International Conference on Machine Learning (ICML)</i> , 2017 (PDF ↗)	
INTERNSHIPS	SRI International , Giedrius Burachas Stochastic Video Prediction for Navigation <ul style="list-style-type: none">Applied disentangled representations for stochastic video prediction in a virtual Unity3D environment and the KITTI dataset. University of Texas at Dallas , Prof. Vincent Ng Event Coreference Resolution <ul style="list-style-type: none">Explored the use of recurrent neural networks for event coreference resolution	Summer 2018 Summer 2016
OPEN SOURCE	VisDial-RL in PyTorch , Prof. Dhruv Batra batra-mlp-lab/visdial-rl ↗ <ul style="list-style-type: none">Lead the open source project for implementing VisDial RL - <i>Learning Cooperative Visual Dialog Agents using Deep Reinforcement Learning</i> by Das and Kottur et. al., 2017, in PyTorch.	July 2018 (Github ↗)
TEACHING EXPERIENCE	Teaching Assistant , Deep Learning, Georgia Tech <ul style="list-style-type: none">Served as TA for CS 7643/4803 in Fall 2018 and Fall 2019.Gave an introductory lecture on dynamic programming methods for solving MDPs and an introduction to Reinforcement Learning in Fall 2019. Tutor , Fundamentals of Computing (ESC101), IIT Kanpur <ul style="list-style-type: none">Taught in weekly tutorial classes for ESC101 in Fall 2016 and Spring 2017.Recorded video lectures in Hindi and partly in English as a part of the course offering to aid students struggling with understanding English.	(RL slides pdf ↗) (YouTube playlist ↗)
REVIEWING	Served as a reviewer for ECCV 2018, CVPR 2019, ICLR 2019, ICLR 2020, AAAI 2020, NeurIPS 2020, ICML 2021, ICLR 2021, NeurIPS 2021, ICLR 2022.	

**ACADEMIC
ACCOLADES**

- Received **Academic Excellence Award** twice for outstanding academic performance (awarded to top 7% students in the institute) from 2013-15
- Received an **A* grade** in 8 courses (awarded to top 1-2% students in a course)
- Secured **All India Rank 414** (among 150,000 students) in JEE Advanced 2013
- Secured **All India Rank 313** (among 5,000,000 students) in JEE Mains 2013

**TECHNICAL
SKILLS**

Languages : Python, Shell, C, C++, R, Matlab/Octave
Software & Tools : PyTorch, TensorFlow, L^AT_EX, Git