Suraj Nair

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EDUCATION Stanford University, Stanford, CA

2018-Present

Ph.D. in Computer Science

Advisors: Chelsea Finn, Silvio Savarese

California Institute of Technology, Pasadena, CA	2014-2018
Bachelor of Science in Computer Science	GPA: $3.9/4.0$

Advisor: Yisong Yue

EXPERIENCE

Facebook AI Research, Research Intern	2021-Present
Google Brain, Research Intern/Student Researcher	2018-2019
Stanford Vision and Learning Lab, Visiting Researcher	2017
Vizzario, Inc., Machine Learning Consultant	2017
Caltech DOLCIT, Student Researcher	2016-2018
OpenFog Consortium, Caltech Representative	2016-2018
General Electric, Current, Software Development Intern	2016
KloudData, Inc., Software Engineering Intern	2015

& PREPRINTS

- PUBLICATIONS [18] Suraj Nair, Eric Mitchell, Kevin Chen, Brian Ichter, Silvio Savarese, Chelsea Finn. Learning Language-Conditioned Robot Behavior from Offline Data and Crowd-Sourced Annotation. Conference on Robot Learning (CoRL). 2021.
 - [17] Bohan Wu, Suraj Nair, Li Fei-Fei*, Chelsea Finn*. Example-Driven Model-Based Reinforcement Learning for Solving Long-Horizon Visuomotor Tasks. Conference on Robot Learning (CoRL). 2021.
 - [16] Mohammad Babaeizadeh, Mohammad Taghi Saffar, Suraj Nair, Sergey Levine, Chelsea Finn, Dumitru Erhan. FitVid: Overfitting in Pixel-Level Video Prediction. Arxiv Preprint. 2021
 - [15] Annie Chen, Suraj Nair, Chelsea Finn. Learning Generalizable Robotic Reward Functions from "In-The-Wild" Human Videos. Robotics: Science and Systems (RSS). 2021
 - [14] Bohan Wu, Suraj Nair, Roberto Martin-Martin, Li Fei-Fei*, Chelsea Finn*. Greedy Hierarchical Variational Autoencoders for Large-Scale Video Prediction, IEEE Conference on Computer Vision and Pattern Recognition (CVPR). 2021
 - [13] Stephen Tian, Suraj Nair, Frederik Ebert, Sudeep Dasari, Benjamin Eysenbach, Chelsea Finn, Sergey Levine. Model-Based Visual Planning with Self-Supervised Functional Distances. International Conference on Learning Representations (ICLR). 2021.
 - [12] Annie Chen*, HyunJi Nam*, Suraj Nair*, Chelsea Finn. Batch Exploration with Examples for Scalable Robotic Reinforcement Learning. Robotics and Automoation Letters (RA-L) and IEEE International Conference on Robotics and Automation (ICRA). 2021
 - [11] Brijen Thananjeyan*, Ashwin Balakrishna*, Suraj Nair, Michael Luo, Krishnan Srinivasan, Minho Hwang, Joey E. Gonzalez, Chelsea Finn, Ken Goldberg. Recovery Rl: Safe Reinforcement Learning with Learned Recovery Zones. Robotics and Automoation Letters (RA-L) and IEEE International Conference on Robotics and Automation (ICRA). 2021

- [10] **Suraj Nair**, Silvio Savarese, Chelsea Finn. Goal-Aware Prediction: Learning to Model What Matters. *International Conference on Machine Learning (ICML)*. 2020.
- [9] Henrik Marklund*, **Suraj Nair***, Chelsea Finn. Exact (Then Approximate) Dynamics Programming for Deep Reinforcement Learning Workshop on Biases, Invariances, and Generalization in RL, International Conference on Machine Learning (ICML). 2020.
- [8] **Suraj Nair**, Chelsea Finn. Hierarchical Foresight: Self-Supervised Learning of Long-Horizon Tasks via Visual Subgoal Generation. *International Conference on Learning Representations (ICLR)*. 2020.
- [7] Suraj Nair, Mohammad Babaeizadeh, Chelsea Finn, Sergey Levine, Vikash Kumar. Time Reversal As Self-Supervision. *IEEE International Conference on Robotics and Automation (ICRA)*. 2020.
- [6] Suraj Nair, Yuke Zhu, Silvio Savarese, Li Fei-Fei. Causal Induction from Visual Observations for Goal Directed Tasks. Workshop on Causal Machine Learning, Neural Information Processing Systems (NeurIPS). 2019.
- [5] Sudeep Dasari, Frederik Ebert, Stephen Tian, **Suraj Nair**, Bernadette Bucher, Karl Schmeckpeper, Siddharth Singh, Sergey Levine, Chelsea Finn. RoboNet: Large-Scale Multi-Robot Learning. *Conference on Robot Learning (CoRL)*. 2019.
- [4] De-An Huang*, **Suraj Nair***, Danfei Xu*, Yuke Zhu, Animesh Garg, Li Fei-Fei, Silvio Savarese, Juan Carlos Niebles. Neural Task Graphs: Generalizing to Unseen Tasks from a Single Video Demonstrations. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. 2019.
- [3] Danfei Xu*, **Suraj Nair***, Yuke Zhu, Julian Gao, Animesh Garg, Li Fei-Fei, Silvio Savarese. Neural Task Programming: Learning to Generalize Across Hierarchical Tasks. *IEEE International Conference on Robotics and Automation (ICRA)*. 2018.
- [2] Men-Andrin Meier, Zachary E Ross, Anshul Ramachandran, Ashwin Balakrishna, **Suraj Nair**, Peter Kundzicz, Zefeng Li, Jennifer Andrews, Egill Hauksson, Yisong Yue. Reliable RealTime Seismic Signal/Noise Discrimination With Machine Learning. *Journal of Geophysical Research: Solid Earth.* 2019.
- [1] **Suraj Nair**, Anshul Ramachandran, Peter Kundzicz. Annotated Reconstruction of 3D Spaces Using Drones. *IEEE MIT URTC*. 2017. **Best Paper Presentation**.

TALKS	Time Reversal as Self-Supervision Berkeley Robotic Artificial Intelligence and Learning Lab.	2018
	Applying Neural Networks in IoT Use Cases	2017
	Internet of Things World Congress 2017	
TEACHING	Teaching Assistant, Stanford University	2019, 2020
	CS 330: Deep Multi-Task and Meta Learning	
	Teaching Assistant, California Institute of Technology	2017
	CS/EE 155: Machine Learning/Data Mining	
	Teaching Assistant, California Institute of Technology	2016
	CS 121: Introduction to Relational Databases	
AWARDS &	National Science Foundation Graduate Research Fellowship	2018-2021
HONORS	Best Paper Presentation - IEEE MIT URTC	2017
	Caltech Summer Undergraduate Research Fellowship Recipient	2017

PROFESSIONAL Paper Reviewing:

ACTIVITIES Neural Information Processing Systems (NeurIPS) 2020, 2021

International Conference on Machine Learning (ICML) 2020, 2021

International Conference on Learning Representations (ICLR) 2019, 2020, 2021 IEEE International Conference on Robotics and Automation (ICRA) 2019, 2020

Conference on Robot Learning (CoRL) 2021

IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2019, 2020

International Conference on Computer Vision (ICCV) 2021