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Google Scholar: https://scholar.google.com/citations?user=UpZmJI0AAAAJ&hl=en
h-index: 47
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Education

University of California Berkeley	Berkeley, CA	Computer Science	Ph.D., 2018
Indian Institute of Technology Kanpur	Kanpur, India	Electrical Engineering	BTech, 2011

Appointments

- Associate Professor, MIT July 2024-
- Co-Founder, Eka Robotics, May 2024
- Assistant Professor, MIT, July 2019-2024
- Advisor to Common Sense Machines Inc., Lab0 Inc., Tutor Intelligence Inc., AI Foundry Inc.
- Co-Founder and Chief AI Officer, SafelyYou Inc., Dec 2015 – July 2019

Awards and Honors

- IEEE/RSJ IROS Toshio Fukuda Young Professional Award, 2025
- IEEE RAS Early Academic Career Award in Robotics and Automation, 2024
- IIT Kanpur Young Alumnus Award, 2024
- Amazon Research Award, 2020, 2021, 2023
- Salesforce Research Award, 2019
- Sony Faculty Research Award, 2018
- Best Review Award, International Conference on Learning Representations (ICLR), 2017
- Fulbright Science and Technology Award, 2011
- Goldman Sachs Global Leaders Award, 2009

Best Paper Awards

- Outstanding Paper, NeurIPS workshop on Continual and Compatible Foundation Models, 2025
- Best Paper Award, Dexterous Manipulation Workshop at Robotics Science and Systems (RSS) 2025
- Best Paper Finalist, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2024
- Best Paper Award, Conference on Robot Learning (CoRL) 2021
- Best Student Paper Award, Computer Supported Collaborative Learning, 2011

Awards to Research Advisees

- 2024 Qualcomm Innovation Fellowship awarded to Idan Shenfeld and Zhang-Wei Hong.
- 2024 Charles & Jennifer Johnson MEng Thesis Award in Artificial Intelligence and Decision Making, a department level honor awarded to Meenal Parakh for her Masters Thesis.
- 2024 Jeremy Gerstle UROP Award for undergraduate research, a department level honor at MIT awarded to Srinath Mahankali for his Undergraduate research.
- 2024 NSF GRFP Award, Shreya Karpoor
- 2024 NSF GRFP Award, Alina Sarmiento
- 2024 NDSEG Fellowship, Eric Chen
- 2024 Pillar AI Fellowship, Ruben Castro Ornelas
- 2023 Barry Goldwater Scholarship, awarded to Srinath Mahankali
- 2022 Ernst A. Guillemin Thesis Award in Artificial Intelligence and Decision Making, a department level honor at MIT awarded to Gabe Margolis for his Masters Thesis.
- 2021 Jeremy Gerstle Undergraduate Research Award, a department level honor at MIT awarded to Joshua Gruenstien for his Undergraduate Thesis.

Representative Publications

Zweiger, Adam, Jyothish Pari, Han Guo, Ekin Akyürek, Yoon Kim, and Pulkit Agrawal. "Self-Adapting Language Models." *Advances in Neural Information Processing Systems (NeurIPS), 2025.*

Romero, Branden, Hao-Shu Fang, Pulkit Agrawal, and Edward Adelson, EyeSight Hand: Design of a Fully-Actuated Dexterous Robot Hand with Integrated Vision-Based Tactile Sensors and Compliant Actuation", In *IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS), 2024. **(Best Paper Award Finalist)**

Villasevil, Marcel Torne and Anthony Simeonov, Zechu Li, April Chan, Tao Chen, Abhishek Gupta, Pulkit Agrawal "Reconciling Reality through Simulation: A Real-To-Sim-to-Real Approach for Robust Manipulation", In *Robotics Science and Systems (RSS),* 2024

Chen, Tao, Megha Tippur, Siyang Wu, Vikash Kumar, Edward Adelson, and Pulkit Agrawal. "Visual Dexterity: In-Hand Reorientation of Novel and Complex Object Shapes", *Science Robotics, 8(84), p.eadc9244*., 2023.

Margolis, Gabriel*, Ge Yang*, Kartik Paigwar, Tao Chen and Pulkit Agrawal, "Rapid Locomotion via Reinforcement Learning", In *Robotics Science and Systems (RSS),* 2022. (*equal contribution)

Chen, Eric, Zhang-Wei Hong, Joni Pajarinen, and Pulkit Agrawal. "Redeeming Intrinsic Rewards via Constrained Optimization." In *Advances in Neural Information Processing Systems (NeurIPS). 2022*

Pathak, Deepak, Pulkit Agrawal, Alexei A. Efros, and Trevor Darrell." Curiosity-driven exploration by self-supervised prediction." In *Proceedings of the 34th International Conference on Machine Learning*, in PMLR 70:2778-2787. 2017.

Agrawal, Pulkit*, Ashvin V. Nair*, Pieter Abbeel, Jitendra Malik, and Sergey Levine. "Learning to poke by poking: Experiential learning of intuitive physics." In *Advances in Neural Information Processing Systems*, pp. 5074-5082. 2016. (*equal contribution)

Agrawal, Pulkit, Joao Carreira, and Jitendra Malik. "Learning to see by moving." In *Proceedings of the IEEE International Conference on Computer Vision*, pp. 37-45. 2015.

Major Media Coverage

- *Self-Adapting Language Models,* featured in Wired, Venture Beat, etc.
- *DribbleBot,* featured in TechCrunch, Yahoo! News, Popular Science, NBC Boston, WHDH TV, Insider, etc.
- *Rapid Locomotion via Reinforcement Learning,* featured in Wired, Popular Science, BBC, Forbes, Gizmodo, etc.
- *Curiosity Driven Exploration by Self-Supervised Prediction,* featured in MIT Tech Review, New Scientist, Quanta Magazine, Engadget, NYPost, Futurism, Digital Trends, Publico, India Times , Tech Xplore etc.
- *Learning to perform physical experiments via deep reinforcement learning*, featured in New scientist, The Stack.
- *Learning to Poke by Poking: Experiential Learning of Intuitive Physics,* featured in MIT Tech Review
- *A System for General In-Hand Re-Orientation,* featured in MIT News, IEEE Spectrum, The Robot Report, etc.

All Publications

[103] Sabounchi, Moein, Jacob M. Desman, Idan Shenfeld, Pushkala Jayaraman, Michelle Campoli, Roopa D. Kohli-Seth, Alexander W. Charney, Pulkit Agrawal, Girish N. Nadkarni, and Ankit Sakhuja. "KidneyPilot: Reinforcement Learning Model for Prevention of Persistent AKI After Cardiac Surgery: FR-OR005." *Journal of the American Society of Nephrology* 36, no. 10S (2025): 10-1681.

[102] Segal, Nofit, Aviv Netanyahu, Kevin P. Greenman, Pulkit Agrawal, and Rafael Gómez-Bombarelli. "Known unknowns: Out-of-distribution property prediction in materials and molecules." *npj Computational Materials* 11, no. 1 (2025): 345

[101] Zhang, Zhen, Zhichu Ren, Chia-Wei Hsu, Weibin Chen, Zhang-Wei Hong, Chi-Feng Lee, Aubrey Penn et al. "A multimodal robotic platform for multi-element electrocatalyst discovery." *Nature* (2025): 1-3.

[100] Zweiger, Adam, Jyothish Pari, Han Guo, Ekin Akyürek, Yoon Kim, and Pulkit Agrawal. "Self-Adapting Language Models." In *Advances in Neural Information Processing Systems (NeurIPS), 2025.*

[99] Shenfeld, Idan, Felix Faltings, Pulkit Agrawal, and Aldo Pacchiano. "Language model personalization via reward factorization." In *Conference on Language Models (CoLM), 2025.*

[98] Han, Seungwook, Jyothish Pari, Samuel J. Gershman, and Pulkit Agrawal. "General reasoning requires learning to reason from the get-go." In *International Conference on Machine Learning (ICML),* 2025.

[97] Han, Seungwook, Jinyeop Song, Jeff Gore, and Pulkit Agrawal. "Emergence and Effectiveness of Task Vectors in In-Context Learning: An Encoder Decoder Perspective." In *International Conference on Machine Learning (ICML),* 2025.

[96] Fey, Nolan, Gabriel B. Margolis, Martin Peticco, and Pulkit Agrawal. "Bridging the Sim-to-Real Gap for Athletic Loco-Manipulation." In *Robotics Science and Systems (RSS),* 2025.

[95] Torne, Marcel, Arhan Jain, Jiayi Yuan, Vidaaranya Macha, Lars Ankile, Anthony Simeonov, Pulkit Agrawal, and Abhishek Gupta. "Robot Learning with Super-Linear Scaling." In *Robotics Science and Systems (RSS),* 2025.

[94] Hsiao, Yi-Hsuan, Wei-Tung Chen, Yun-Sheng Chang, Pulkit Agrawal, and YuFeng Chen. "Hovering Flight of Soft-Actuated Insect-Scale Micro Aerial Vehicles using Deep Reinforcement Learning." In 2025 IEEE 8th International Conference on Soft Robotics (RoboSoft), pp. 1-7. IEEE, 2025.

[93] Desman, Jacob M., Zhang-Wei Hong, Moein Sabounchi, Ashwin S. Sawant, Jaskirat Gill, Ana C. Costa, Gagan Kumar et al. "A distributional reinforcement learning model for optimal glucose control after cardiac surgery." npj Digital Medicine 8, no. 1 (2025): 1-12.

[92] Oh, Wonsuk, Marinela Veshtaj, Ashwin Sawant, Pulkit Agrawal, Hernando Gomez, Mayte Suarez-Farinas, John Oropello et al. "ORAKLE: Optimal Risk prediction for mAke30 in patients with sepsis associated AKI using deep learning." Critical Care 29, no. 1 (2025): 1-12.

[91] Ankile, Lars, Anthony Simeonov, Idan Shenfeld, Marcel Torne, and Pulkit Agrawal. "From Imitation to Refinement--Residual RL for Precise Assembly." In *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.

[90] Chen, Tao, Eric Cousineau, Naveen Kuppuswamy, and Pulkit Agrawal. "Vegetable peeling: A case study in constrained dexterous manipulation." In *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.

[89] Park, Younghyo, Jagdeep Singh Bhatia, Lars Ankile, and Pulkit Agrawal. "Dexhub and dart: Towards internet scale robot data collection." In *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.

[88] Zhang, Chen Bo Calvin, Zhang-Wei Hong, Aldo Pacchiano, and Pulkit Agrawal. "ORSO: Accelerating Reward Design via Online Reward Selection and Policy Optimization." In *The Thirteenth International Conference on Learning Representations (ICLR)* 2025.

[87] Reuss, Moritz, Jyothish Pari, Pulkit Agrawal, and Rudolf Lioutikov. "Efficient Diffusion Transformer Policies with Mixture of Expert Denoisers for Multitask Learning." In *The Thirteenth International Conference on Learning Representations (ICLR)* 2025.

[86] Ren, Allen Z., Justin Lidard, Lars L. Ankile, Anthony Simeonov, Pulkit Agrawal, Anirudha Majumdar, Benjamin Burchfiel, Hongkai Dai, and Max Simchowitz. "Diffusion policy policy optimization." In *The Thirteenth International Conference on Learning Representations (ICLR)* 2025.

[85] Eßer, Julian, Gabriel B. Margolis, Oliver Urbann, Sören Kerner, and Pulkit Agrawal. "Action Space Design in Reinforcement Learning for Robot Motor Skills." In *8th Annual Conference on Robot Learning,* 2024.

[84] Netanyahu, Aviv, Yilun Du, Antonia Bronars, Jyothish Pari, Josh Tenenbaum, Tianmin Shu, and Pulkit Agrawal. "Few-shot task learning through inverse generative modeling." *Advances in Neural Information Processing Systems* 37 (2024): 98445-98477.

[83] Li, Steven, Rickmer Krohn, Tao Chen, Anurag Ajay, Pulkit Agrawal, and Georgia Chalvatzaki. "Learning multimodal behaviors from scratch with diffusion policy gradient." *Advances in Neural Information Processing Systems* 37 (2024): 38456-38479.

[82] Lee, Chi-Chang, Zhang-Wei Hong, and Pulkit Agrawal. "Going Beyond Heuristics by Imposing Policy Improvement as a Constraint." *Advances in Neural Information Processing Systems* 37 (2024): 138032-138087.

[81] Hwang, Jaedong, Zhang-Wei Hong, Eric R Chen, Akhilan Boopathy, Pulkit Agrawal, and Ila R Fiete, Grid Cell-Inspired Fragmentation and Recall for Efficient Map Building, In *Transactions of Machine Learning Research (TMLR)*, 2024.

[80] Li, Changling, Zhang-Wei Hong, Pulkit Agrawal, Divyansh Garg, and Joni Pajarinen, ROER: Regularized Optimal Experience Replay, In Reinforcement Learning Conference (RLC), 2024.

[79] Romero, Branden, Hao-Shu Fang, Pulkit Agrawal, and Edward Adelson, EyeSight Hand: Design of a Fully-Actuated Dexterous Robot Hand with Integrated Vision-Based Tactile Sensors and Compliant Actuation", In *IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS), 2024. **(Best Paper Award Finalist)**

[78] Bobu, Andreea, Andi Peng, Pulkit Agrawal, Julie A. Shah, and Anca D. Dragan. "Aligning human and robot representations." In *Proceedings of the 2024 ACM/IEEE International Conference on Human-Robot Interaction*, pp. 42-54. 2024.

[77] Ankile, Lars, Anthony Simeonov, Idan Shenfeld, Pulkit Agrawal "JUICER: Data-Efficient Imitation Learning for Robotic Assembly", In *IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS), 2024

[76] Villasevil, Marcel Torne and Anthony Simeonov, Zechu Li, April Chan, Tao Chen, Abhishek Gupta, Pulkit Agrawal "Reconciling Reality through Simulation: A Real-To-Sim-to-Real Approach for Robust Manipulation", In *Robotics Science and Systems (RSS),* 2024

[75] Park, Younghyo, Gabriel Margolis and Pulkit Agrawal, "Position: Automatic Environment Shaping is the Next Frontier in RL", In *International Conference in Machine Learning (ICML),* 2024. **(Oral)**

[74] Majumdar, Arjun, Anurag Ajay, Xiaohan Zhang, Pranav Putta, Sriram Yenamandra, Mikael Henaff, Sneha Silwal et al. "Openeqa: Embodied question answering in the era of foundation models." In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, pp. 16488-16498. 2024.

[73] Mahankali, Srinath, Zhang-Wei Hong, Ayush Sekhari, Alexander Rakhlin and Pulkit Agrawal, "Random Latent Exploration for Deep Reinforcement Learning", In *International Conference in Machine Learning (ICML),* 2024.

[72] Margolis, Gabriel, Ge Yang, Kartik Paigwar, Tao Chen and Pulkit Agrawal, "Rapid Locomotion via Reinforcement Learning", In *Interational Journal of Robotics Research (IJRR),* 2024.

[71] Mahankali, Srinath, Chi-Chang Lee, Gabriel Margolis, Zhang-Wei Hong, and Pulkit Agrawal. "Maximizing Quadruped Velocity by Minimizing Energy". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2024

[70] Tifanny Portela, Gabriel Margolis, Yandong Ji, and Pulkit Agrawal. "Learning Force Control for Legged Locomotion". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2024.

[69] Ornelas, Ruben Castro, Tomas Cantu, Isabel Sperandio, Alexander Slocum, and Pulkit Agrawal. "Everyday finger: a robotic finger that meets the needs of everyday interactive manipulation". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2024.

[68] Parakh, Meenal, Alisha Fong, Anthony Simeonov, Abhishek Gupta, Tao Chen, and Pulkit Agrawal. "Lifelong Robot Learning with Human Assisted Language Planners". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2024.

[67] Yang, Daniel, Davin Tjia, Jacob Herman Berg, Dima Damen, Pulkit Agrawal, and Abhishek Gupta. "Rank2Reward: Learning Shaped Reward Functions from Passive Video". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2024.

[66] Hong, Zhang-Wei, Idan Shenfeld, Tsun-Hsuan Wang, Yung-Sung Chuang, Aldo Pareja, James R. Glass, Akash Srivastava, and Pulkit Agrawal. "Curiosity-driven Red-teaming for Large Language Models." In *The Twelfth International Conference on Learning Representations (ICLR)*. 2024.

[65] Chen, Tao, Megha Tippur, Siyang Wu, Vikash Kumar, Edward Adelson, and Pulkit Agrawal. "Visual Dexterity: In-Hand Reorientation of Novel and Complex Object Shapes.", *Science Robotics*, 2023

[64] Simeonov, Anthony, Ankit Goyal, Lucas Manuelli, Lin Yen-Chen, Alina Sarmiento, Alberto Rodriguez, Pulkit Agrawal, and Dieter Fox. "Shelving, Stacking, Hanging: Relational Pose Diffusion for Multi-modal Rearrangement." *In 7th Annual Conference on Robot Learning (CoRL)*, 2023.

[63] Pamies, Max Balsells I., Marcel Torne Villasevil, Zihan Wang, Samedh Desai, Pulkit Agrawal, and Abhishek Gupta. "Autonomous Robotic Reinforcement Learning with Asynchronous Human Feedback." In *7th Annual Conference on Robot Learning (CoRL),* 2023.

[62] Margolis, Gabriel B., Xiang Fu, Yandong Ji, and Pulkit Agrawal. "Learning Physically Grounded Robot Vision with Active Sensing Motor Policies." *In 7th Annual Conference on Robot Learning (CoRL*), 2023.

[61] Ajay, Anurag, Seungwook Han, Yilun Du, Shaung Li, Abhi Gupta, Tommi Jaakkola, Josh Tenenbaum, Leslie Kaelbling, Akash Srivastava, and Pulkit Agrawal. "Compositional Foundation Models for Hierarchical Planning." *Advances in Neural Information Processing Systems (NeurIPS)*, 2023.

[60] Peng, Andi, Mycal Tucker, Eoin Kenny, Noga Zaslavsky, Pulkit Agrawal, and Julie A. Shah. "Human-guided complexity-controlled abstractions." *Advances in Neural Information Processing Systems* (NeurIPS), 2023.

[59] Torne, Marcel, Max Balsells, Zihan Wang, Samedh Desai, Tao Chen, Pulkit Agrawal, and Abhishek Gupta. "Breadcrumbs to the Goal: Goal-Conditioned Exploration from Human-in-the-Loop Feedback." *Advances in Neural Information Processing Systems (NeurIPS),* 2023.

[58] Peng, Andi, Mycal Tucker, Eoin Kenny, Noga Zaslavsky, Pulkit Agrawal, and Julie Shah. “Human-Guided Complexity-Controlled Abstractions.” *Advances in Neural Information Processing Systems (NeurIPS)*, 2023.

[57] Chen, Boyuan, Chuning Zhu, Pulkit Agrawal, Kaiqing Zhang, and Abhishek Gupta. "Self-Supervised Reinforcement Learning that Transfers using Random Features." *Advances in Neural Information Processing Systems (NeurIPS),* 2023.

[56] Hong, Zhang-Wei, Aviral Kumar, Sathwik Karnik, Abhishek Bhandwaldar, Akash Srivastava, Joni Pajarinen, Romain Laroche, Abhishek Gupta, and Pulkit Agrawal. “Beyond Uniform Sampling: Offline Reinforcement Learning with Imbalanced Datasets.” *Advances in Neural Information Processing Systems (NeurIPS)*, 2023.

[55] Wang, Felix, Ching-Yun Ko, and Pulkit Agrawal. "Visual Pre-training for Navigation: What Can We Learn from Noise?”. In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).* 2023.

[54] Peng, Andi, Aviv Netanyahu, Mark K. Ho, Tianmin Shu, Andreea Bobu, Julie Shah, and Pulkit Agrawal. "Diagnosis, Feedback, Adaptation: A Human-in-the-Loop Framework for Test-Time Policy Adaptation." *In International Conference on Machine Learning (ICML)*, PMLR, 2023.

[53] Li, Zechu*, Tao Chen*, Zhang-Wei Hong, Anurag Ajay, and Pulkit Agrawal. "Parallel Q-Learning: Scaling Off-policy Reinforcement Learning". In *International Conference on Machine Learning (ICML)*, PMLR, 2023. (*equal contribution)

[52] Simchowitz, Max, Anurag Ajay, Pulkit Agrawal, and Akshay Krishnamurthy. "Statistical Learning under Heterogenous Distribution Shift". In *International Conference on Machine Learning (ICML)*, PMLR, 2023.

[51] Huh, Jacob, Brian Cheung, Pulkit Agrawal and Phillip Isola. "Straightening Out the Straight-Through Estimator: Overcoming Optimization Challenges in Vector Quantized Networks". In *International Conference on Machine Learning (ICML)*, PMLR, 2023.

[50] Shenfeld, Idan, Zhang-Wei Hong, Aviv Tamar and Pulkit Agrawal. "TGRL: An Algorithm for Teacher Guided Reinforcement Learning". In *International Conference on Machine Learning (ICML)*, PMLR, 2023.

[49] Pai, Sameer*, Tao Chen*, Megha Tippur*, Edward Adelson, Abhishek Gupta and Pulkit Agrawal. "Tactofind: A Tactile Only System for Object Retrieval". In *International Conference on Robotics and Automation (ICRA)*, 2023. (*equal contribution).

[48] Ji, Yandong*, Gabriel B. Margolis*, and Pulkit Agrawal. "DribbleBot: Dynamic Legged Manipulation in the Wild". In *International Conference on Robotics and Automation (ICRA)*, 2023. (*equal contribution).

[47] Huh, Minyoung, Hossein Mobahi, Richard Zhang, Brian Cheung, Pulkit Agrawal, and Phillip Isola. "The low-rank simplicity bias in deep networks." *Transactions on Machine Learning Research (TMLR)*, 2023

[46] Ajay, Anurag*, Yilun Du*, Abhi Gupta*, Joshua Tenenbaum, Tommi Jaakkola, and Pulkit Agrawal. "Is Conditional Generative Modeling all you need for Decision-Making?."In *International Conference on Learning Representations (ICLR)*, 2023. (*equal contribution).

[45] Hong, Zhang-Wei, Remi Tachet des Combes, Pulkit Agrawal, and Romain Laroche. "Harnessing Mixed Offline Reinforcement Learning Datasets via Trajectory Weighting." In International Conference on Learning Representations. In *International Conference on Learning Representations (ICLR)*, 2023.

[44] Netanyahu, Aviv*, Abhishek Gupta*, Max Simchowitz, Kaiqing Zhang, and Pulkit Agrawal. "Learning to Extrapolate: A Transductive Approach." In *International Conference on Learning Representations (ICLR)*, 2023. (*equal contribution).

[43] Margolis, Gabriel B., and Pulkit Agrawal. "Walk These Ways: Tuning Robot Control for Generalization with Multiplicity of Behavior." In 6th *Annual Conference on Robot Learning (CoRL)*. 2022. **(Oral)**

[42] Simeonov, Anthony*, Yilun Du*, Lin Yen-Chen, Alberto Rodriguez, Leslie Pack Kaelbling, Tomas Lozano-Perez, and Pulkit Agrawal. "SE (3)-Equivariant Relational Rearrangement with Neural Descriptor Fields." In 6th *Annual Conference on Robot Learning (CoRL)*. 2022. (*equal contribution)

[41] Xu, Jie, Sangwoon Kim, Tao Chen, Alberto Rodriguez Garcia, Pulkit Agrawal, Wojciech Matusik, and Shinjiro Sueda. "Efficient Tactile Simulation with Differentiability for Robotic Manipulation." In *6th Annual Conference on Robot Learning* (CoRL). 2022.

[40] Ajay, Anurag*, Abhishek Gupta*, Dibya Ghosh, Sergey Levine, and Pulkit Agrawal. "Distributionally Adaptive Meta Reinforcement Learning." In *Advances in Neural Information Processing Systems (NeurIPS).* 2022. (*equal contribution)

[39] Chen, Eric, Zhang-Wei Hong, Joni Pajarinen, and Pulkit Agrawal. "Redeeming Intrinsic Rewards via Constrained Optimization." In *Advances in Neural Information Processing Systems (NeurIPS). 2022.*

[38] Luo, Haokuan, Albert Yue, Zhang-Wei Hong, and Pulkit Agrawal. "Stubborn: A Strong Baseline for Indoor Object Navigation". In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).* 2022.

[37] Netanyahu, Aviv, Tianmin Shu, Josh Tenenbaum, and Pulkit Agrawal. "Discovering Generalizable Spatial Goal Representations via Graph-based Active Reward Learning" In *International Conference on Machine Learning*, PMLR, 2022.

[36] Ghosh, Dibya, Anurag Ajay, Pulkit Agrawal, and Sergey Levine. "Offline RL Policies Should be Trained to be Adaptive" In *International Conference on Machine Learning*, PMLR, 2022.

[35] Margolis, Gabriel*, Ge Yang*, Kartik Paigwar, Tao Chen and Pulkit Agrawal, "Rapid Locomotion via Reinforcement Learning", In *Robotics Science and Systems (RSS),* 2022. (*equal contribution)

[34] Yang, Ge*, Anurag Ajay*, and Pulkit Agrawal, "Overcoming the Spectral Bias on Neural Value Approximation", In *International Conference on Learning Representations (ICLR)*, 2022. (*equal contribution)

[33] Hong, Zhang-Wei*, Ge Yang*, and Pulkit Agrawal, "Bilinear Value Networks.", In *International Conference on Learning Representations (ICLR)*, 2022. (*equal contribution)

[32] Dangovski, Rumen, Li Jing, Charlotte Loh, Seungwook Han, Akash Srivastava, Brian Cheung, Pulkit Agrawal, and Marin Soljačić. "Equivariant Contrastive Learning.", In *International Conference on Learning Representations (ICLR),* 2022.

[31] Zlokapa, Lara, Yiyue Luo, Jie Xu, Michael Foshey, Kui Wu, Pulkit Agrawal, and Wojciech Matusik. “An Integrated Design Pipeline for Tactile Sensing Robotic Manipulators.”, In *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.

[30] Li, Richard, Carlos Esteves, Ameesh Makadia, and Pulkit Agrawal, “Stacking Objects using Contact Plane Registration.”, In *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.

[29] Simeonov, Anthony*, Yilun Du*, Andrea Tagliasacchi, Joshua B. Tenenbaum, Alberto Rodriguez, Pulkit Agrawal[+], and Vincent Sitzmann[+]. "Neural Descriptor Fields: SE (3)-Equivariant Object Representations for Manipulation.", In *IEEE International Conference on Robotics and Automation (ICRA)*, 2022. (*equal contribution; [+]equal advising)

[28] Chen, Tao, Jie Xu, and Pulkit Agrawal. "A system for general in-hand object re-orientation." In 5th *Annual Conference on Robot Learning (CoRL)*. 2021 **(Best Paper Award)**

[27] Margolis, Gabriel B., Tao Chen, Kartik Paigwar, Xiang Fu, Donghyun Kim, Sangbae Kim, and Pulkit Agrawal. "Learning to Jump from Pixels." In 5th *Annual Conference on Robot Learning (CoRL)*. 2021

[26] Agrawal, Pulkit. "The Task Specification Problem." In 5th *Annual Conference on Robot Learning (CoRL)*, Blue Sky Submission Track. 2021

[25] Fu, Xiang, Ge Yang, Pulkit Agrawal, and Tommi Jaakkola. "Learning task informed abstractions." In *International Conference on Machine Learning*, pp. 3480-3491. PMLR, 2021.

[24] Xu, Jie, Tao Chen, Lara Zlokapa, Michael Foshey, Wojciech Matusik, Shinjiro Sueda, and Pulkit Agrawal. "An End-to-End Differentiable Framework for Contact-Aware Robot Design.", In *Robotic Science and Systems (RSS),* 2021

[23] Gruenstein, Joshua, Tao Chen, Neel Doshi, and Pulkit Agrawal. "Residual Model Learning for Microrobot Control." *IEEE International Conference on Robotics and Automation (ICRA)*. 2021.

[22] Li, Yunzhu, Shuang Li, Vincent Sitzmann, Pulkit Agrawal, and Antonio Torralba. "3d neural scene representations for visuomotor control." In 5th *Annual Conference on Robot Learning (CoRL)*. 2021

[21] Ajay, Anurag, Aviral Kumar, Pulkit Agrawal, Sergey Levine, and Ofir Nachum. "Opal: Offline primitive discovery for accelerating offline reinforcement learning." In *International Conference on Learning Representations (ICLR).* 2021.

[20] Bayen, Eleonore, Shirley Nickels, Glen Xiong, Julien Jacquemot, Raghav Subramaniam, Pulkit Agrawal, Raheema Hemraj, Alexandre Bayen, Bruce L. Miller, and George Netscher. "Reduction of time on the ground related to real-time video detection of falls in memory care facilities: observational study." In *Journal of Medical Internet Research* 23, no. 6 (2021): e17551.

[19] Simeonov, Anthony, Yilun Du, Beomjoon Kim, Francois R. Hogan, Joshua Tenenbaum, Pulkit Agrawal, and Alberto Rodriguez. "A long horizon planning framework for manipulating rigid pointcloud objects." In 4th *Annual Conference on Robot Learning (CoRL).* 2020.

[18] Li, Richard, Allan Jabri, Trevor Darrell, and Pulkit Agrawal. "Towards practical multi-object manipulation using relational reinforcement learning." In 2020 IEEE *International Conference on Robotics and Automation* (ICRA), pp. 4051-4058. 2020.

[17] Cheung, Brian, Alexander Terekhov, Yubei Chen, Pulkit Agrawal, and Bruno Olshausen. "Superposition of many models into one." *Advances in Neural Information Processing Systems,* pp. 10867-10876. 2019. E.

[16] Bayen, S. Nickels, G. Xiong, J. Jacquemot, P. Agrawal, A. Bayen, B. L. Miller, G. Netscher "P1-491: real-time video detection of falls in dementia managed care: a significant reduction of time until assistance and time on the ground in fallers thanks to safelyyou technology" Alzheimer's and Dementia [15525260] 15. (2019): P457-P457. Print.

[15] Zhang, Jeffrey, Sravani Gajjala, Pulkit Agrawal, Geoffrey H. Tison, Laura A. Hallock, Lauren Beussink-Nelson, Mats H. Lassen et al. "Fully automated echocardiogram interpretation in clinical practice: feasibility and diagnostic accuracy." *Circulation* 138, no. 16 (2018): 1623-1635

[14] Dubey, Rachit, Pulkit Agrawal, Deepak Pathak, Thomas L. Griffiths, and Alexei A. Efros "Investigating Human Priors for Playing Video Games. " In *Proceedings of the 35th International Conference on Machine Learning*, 2018.

[13] Pathak, Deepak*, Parsa Mahmoudieh*, Guanghao Luo*, Pulkit Agrawal*, Dian Chen, Yide Shentu, Evan Shelhamer, Jitendra Malik, Alexei A. Efros, and Trevor Darrell. "Zero-shot visual imitation." In *International Conference on Learning Representations. 2018.* (*equal contribution) **(Oral)**

[12] Bayen, Eleonore, Julien Jacquemot, George Netscher, Pulkit Agrawal, Lynn Tabb Noyce, and Alexandre Bayen. "Reduction in fall rate in dementia managed care through video incident review: pilot study." *Journal of Medical Internet Research* 19, no. 10 (2017)

[11] Nair, Ashvin*, Dian Chen*, Pulkit Agrawal*, Phillip Isola, Pieter Abbeel, Jitendra Malik, and Sergey Levine. Combining self-supervised learning and imitation for vision-based rope manipulation." In *2017 IEEE International Conference on Robotics and Automation (ICRA)*, pp. 2146-2153. (*equal contribution)

[10] Denil, Misha, Pulkit Agrawal, Tejas D. Kulkarni, Tom Erez, Peter Battaglia, and Nando de Freitas. Learning to perform physics experiments via deep reinforcement learning." *International Conference on Learning Representations. 2017.*

[9] Felsen, Panna, Pulkit Agrawal, and Jitendra Malik. "What will happen next? forecasting player moves in sports videos." In *Proceedings of the IEEE International Conference on Computer Vision*, pp. 3342-3351. 2017.

[8] Pathak, Deepak, Pulkit Agrawal, Alexei A. Efros, and Trevor Darrell." Curiosity-driven exploration by self-supervised prediction." In *Proceedings of the 34th International Conference on Machine Learning*, in PMLR 70:2778-2787. 2017.

[7] Agrawal, Pulkit*, Ashvin V. Nair*, Pieter Abbeel, Jitendra Malik, and Sergey Levine. "Learning to poke by poking: Experiential learning of intuitive physics." In *Advances in Neural Information Processing Systems*, pp. 5074-5082. 2016. (*equal contribution) **(Oral)**

[6] Fragkiadaki, Katerina*, Pulkit Agrawal*, Sergey Levine, and Jitendra Malik. Learning visual predictive models of physics for playing billiards." *In International Conference on Learning Representations.* 2016. (*equal contribution)

[5] Zamir, Amir R., Tilman Wekel, Pulkit Agrawal, Colin Wei, Jitendra Malik, and Silvio Savarese. "Generic 3d representation via pose estimation and matching." In *European Conference on Computer Vision*, pp. 535-553. Springer, Cham, 2016.

[4] Carreira, Joao, Pulkit Agrawal, Katerina Fragkiadaki, and Jitendra Malik. Human pose estimation with iterative error feedback." In *Proceedings of the IEEE conference on computer vision and pattern recognition*, pp. 4733-4742. 2016.

[3] Agrawal, Pulkit, Joao Carreira, and Jitendra Malik. "Learning to see by moving." In *Proceedings of the IEEE International Conference on Computer Vision*, pp. 37-45. 2015.

[2] Agrawal, Pulkit, Ross Girshick, and Jitendra Malik. "Analyzing the performance of multilayer neural networks for object recognition." In *European conference on computer vision*, pp. 329-344. Springer, Cham, 2014.

[1] Gweon, Gahgene, Pulkit Agrawal, Mikesh Udani, Bhiksha Raj, and Carolyn Rose."The automatic assessment of knowledge integration processes in project teams." In *Proceedings of Computer Supported Collaborative Learning*, pp. 462-469. 2011. **(Best Student Paper Award)**

Workshop Papers / Pre Prints

[12] Shenfeld, Idan, Jyothish Pari, and Pulkit Agrawal. "RL's Razor: Why Online Reinforcement Learning Forgets Less." *arXiv preprint arXiv:2509.04259* (2025). **Best Paper Award at NeurIPS Workshop.**

[11] Margolis, Gabriel B., Michelle Wang, Nolan Fey, and Pulkit Agrawal. "SoftMimic: Learning Compliant Whole-body Control from Examples." arXiv preprint arXiv:2510.17792 (2025).

[10] Fang, Hao-Shu, Branden Romero, Yichen Xie, Arthur Hu, Bo-Ruei Huang, Juan Alvarez, Matthew Kim et al. "Dexop: A device for robotic transfer of dexterous human manipulation." arXiv preprint arXiv:2509.04441 (2025). **Best Paper Award at RSS Workshop.**

[9] Peticco, Martin, Gabriella Ulloa, John Marangola, Nitish Dashora, and Pulkit Agrawal. "Dexwrist: A robotic wrist for constrained and dynamic manipulation." arXiv preprint arXiv:2507.01008 (2025).

[8] Han, Seungwook, Idan Shenfeld, Akash Srivastava, Yoon Kim, and Pulkit Agrawal. "Value augmented sampling for language model alignment and personalization." arXiv preprint arXiv:2405.06639 (2024).

[7] Sen, Bipasha, Michelle Wang, Nandini Thakur, Aditya Agarwal, and Pulkit Agrawal. "Learning to Look Around: Enhancing Teleoperation and Learning with a Human-like Actuated Neck." arXiv preprint arXiv:2411.00704 (2024).

[6] Pari, Jyothish, Samy Jelassi, and Pulkit Agrawal. "Collective model intelligence requires compatible specialization." arXiv preprint arXiv:2411.02207 (2024).

[5] Karnik, Sathwik, Zhang-Wei Hong, Nishant Abhangi, Yen-Chen Lin, Tsun-Hsuan Wang, and Pulkit Agrawal. "Embodied Red Teaming for Auditing Robotic Foundation Models." *arXiv preprint arXiv:2411.18676* (2024).

[4] Huh, Minyoung, Brian Cheung, Jeremy Bernstein, Philip Isola and Pulkit Agrawal, "Training Neural Networks from Scratch with Parallel Low-Rank Adapters", arXiv preprint arXiv:2402.16828 (2024).

[3] Pathak, Deepak*, Yide Shentu*, Dian Chen*, Pulkit Agrawal*, Trevor Darrell, Sergey Levine, and Jitendra Malik. Learning instance segmentation by interaction." In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops*, pp. 2042-2045. 2018. (*equal contribution)

[2] Huh, Minyoung, Pulkit Agrawal, and Alexei A. Efros. "What makes ImageNet good for transfer learning?." NeurIPS Workshop 2016.

[1] Agrawal, Pulkit, Dustin Stansbury, Jitendra Malik, and Jack L. Gallant. "Pixels to voxels: modeling visual representation in the human brain." *arXiv preprint arXiv:1407.5104* (2014); NeurIPS Workshop 2015.

Patents

- Co-Inventor, Hand Exoskeleton System For Data Collection, 63/703866, filed October 4, 2024
- Co-Inventor, System and method for detecting, recording and communicating events in the care and treatment of cognitively impaired persons, 11232694, USA (granted)
- Co-Author, System and Method for Detecting, Recording and Communicating Events in the Care and Treatment of Cognitively Impaired Persons, US20190287376A1, USA (application filed)
- Co-Author, Invariant Object Representation of Images Using Spiking Neural Networks, US20150278628A1 (application filed)

Invited Talks

- ECE Seminar, Tufts University, Nov 2025
- *Dexterity First: Hands are the gateway to Humanoid Robotics,* Keynote Talk, The IEEE-RAS International Conference on Humanoid Robots, Oct 2025
- Workshop Talk, Humanoids Workshop on Sim-to-Real Transfer for Humanoid Robots, Oct 2025
- *Questioning the role of vision in robot manipulation,* ICCV Workshop on Learning to See: Advancing Spatial Understanding for Embodied Intelligence*,* ICCV, Oct 2025
- *On the science of an AI Scientist,* IROS Workshop on Embodied AI and Robotics for Future Scientific Discovery*, Oct 2025*

- Workshop Talk, IROS Workshop on LeaPRiDE: Learning, Planning, and Reasoning in Dynamic Environments, IROS, Oct 2025
- Robotics Seminar Talk, Georgia Tech, Oct 2025
- *Dexterity First,* Keynote Talk, North Eastern Manipulation Symposium (NEMS), May 2025
- *Pathway to Robotic Intelligence,* Guest Lecture, Robotics Manipulation Class, Cornell University, May 2025
- *Are humanoids the future of Robotics,* Devo Labs, May 2025
- *Pathway to Robotic Intelligence*, Robotics and Vision Talk, ETH Zurich, April 2025
- Speaker and Panelist in NSF Workshop on Reinforcement Learning, January 2025
- *Thoughts on Dexterous Manipulation*, CoRL Workshop on Dexterous Manipulation, November 2024
- *Reactive Intelligence for Legged Robots*, CoRL Workshop on LocoLearn: From Bioinspired Gait Generation to Active Perception, November 2024
- *Pathway to Robotics Intelligence,* MSR Cortex Series Talk, September 2024
- *Pathway to Robotics Intelligence,* TTIC Summer School on Multimodal AI, August 2024
- *Pathway to Robotics Intelligence,* RSS Workshop on Embodiment-Aware Robot Learning, July 2024
- *Open Challenges and Perspectives in Learning from Tactile Sensing*, RSS Workshop on Noosphere: Tactile Sensing for General Purpose Robot Learning, July 2024
- Speaker at Simons Workshop on Understanding Lower Level Intelligence, June 2024.
- *Human-in-the-loop Sensorimotor Learning*, ICRA Workshop on Human-aligned Reinforcement Learning for Autonomous Agents and Robots, May 2024
- *Towards Dexterous and Wholebody Control*, ICRA Workshop on Loco-Manipulation: Algorithms, Challenges & Applications, May 2024
- *Road to Agile and Dexterous Control requires removing the human bottleneck,* ICRA Workshop on Agile Robotics: From Perception to Dynamic Action, May 2024
- *Towards Robot Intelligence,* Keynote at CSAIL Alliance Annual Meeting, April 2024
- *Robot Foundation Model via Simulation,* Cornell Robotics Seminar, March 2024
- *Towards Robot Intelligence*, AI Horizons, National University of Singapore (NUS), March 2024
- *Dilemmas in Reinforcement and Imitation Learning*, ISAIM Special Session on Deep Reinforcement Learning, January 2024
- *A Pathway to Physical Intelligence*, Stanford Robotics Seminar, November 2023
- *A Pathway to Physical Intelligence*, Michigan Robotics Seminar, October 2023
- *Towards Physical Intelligence as API*, Princeton Robotics Seminar, September 2023
- *Towards Real-World Ready Dexterous Manipulation*, Dexterous Manipulation Workshop, RSS, July 2023
- Keynote at AI@Work Leadership Summit, Asia School of Business, June 2023
- Talk at DeepMind, June 2023
- Talk at Oxford University, June 2023
- Worskhop on Neuromechanics Meets Deep learning, International Conference on Robotics and Automation (ICRA), May 2023
- Talk at Italian Institute of Technology, Genoa, May 2023
- Experiential Robotics Seminar Series, Northeastern University, May 2023
- GRASP Robotics Talk Series, University of Pennsylvania, March 2023
- Forum for Artificial Intelligence, UT Austin, March 2023
- Invited Panelist, South by Southwest (SXSW), March 2023
- Artificial Intelligence & Athropogeny Symposium, Salk Institute and UC Sandiego, March 2023
- Keynote at Doctoral Consortium, Association for Advancement of Artificial Intelligence (AAAI), Feb 2023
- Tutorial at Workshop on Sim-to-Real Robot Learning: Locomotion and Beyond, Conference on Robot Learning (CoRL), Dec 2022
- Workshop on Learning for Agile Robotics, Conference on Robot Learning (CoRL), Dec 2022
- Boston Dynamics AI Institute, Dec 2022
- TedX MIT, Dec 2022
- Robotics Colloqium at University of Washington, Nov 2022
- MIT-IBM Watson AI Lab Seminar Series, Nov 2022
- Keynote at Artificial Intelligence and Robotics Session, Bengaluru Technology Summit, 2022.

- Workshop on Perceptive Locomotion, IEEE International Conference on Intelligent Robots and Systems (IROS), October 2022
- Illinois Robotics Seminar, University of Illinois at Urbana Champaign, October 2022
- Google Research India Seminar Series, September 2022
- Workshop on Science of Bumping into Things, Robotics Science and Systems, June 2022
- Open Data Science Conference (ODSC) Europe 2022, June 2022
- Technion Robotics Seminar, Technion – Israel Institute of Technology, April 14 2022.
- MIT Robotics Seminar, Massachussets Institute of Technology, March 2022
- Workshop on Rethinking Robot Learning, IEEE International Conference on Robotics and Automation (ICRA), June 2021
- Robot Learning Seminar Series, MILA, March 12 2021.
- Invited Speaker at EmTech Digitial hosted by MIT Technology Review, Mar 25 2021.
- The NSF Institute of Artificial Intelligence and Fundamental Interactions Colloqium, Massachussets Institute of Technology, February 18 2021
- Embodied Intelligence Seminar, Massachussets Institute of Technology, 2021
- Re-Work Deep Reinforcement Learning Summit, San Francisco, 2019
- Machine Learning Summer School, IIIT Hyderabad, July 2019
- Facebook Human and Machine Intelligence Workshop, May 2019
- Computer Science Lecture, University of Toronto, April 2018
- Computer Science Lecture, Stanford University, April 2018
- Electrical Engineering and Computer Science Special Seminar, MIT, Mar 2018
- Guest Lecture in Introduction to Deep Learning, Carnegie Mellon University, Nov 1 2017
- LIGO Seminar, Caltech, July 27 2017
- YConf, San Francisco, June 10 2017
- VASC Seninar, Carnegie Mellon University, April 2017
- Invited Talk, IIT Kanpur, January 2017
- Intuitive Physics Workshop at NIPS (now NeurIPS), December 2016
- Invited Tutorial, Indian Conference on Vision, Graphics and Image Processing (ICVGIP) 2016
- Invited Talk, NASSCOM, Bangalore, 2016
- Invited Talk, Oxford University, September 6 2016
- Google Brain Seminar, Mountain View, February 8 2016
- Workshop on Methods for Understanding Neural Systems Workshop at NIPS 2015
- Invited talk at Intel, May 13 2015

Professional Service

- Program Chair, Conference on Robot Learning (CoRL), 2024
- Associate Editor, International Journal of Robotics Research (IJRR). 2023-
- Area Chair, International Conference on Learning Representations (ICLR). 2021-22.
- Area Chair, Neural Information Processing Systems (NeurIPS). 2020-23.
- Area Chair, International Conference on Machine Learning (ICML). 2020-22.
- Area Chair, Conference on Robot Learning (CoRL). 2019-23.

Reviewer

- Science Robotics
- International Conference on Learning Representations (ICLR)
- Neural Information Processing Systems (NeurIPS)
- International Conference on Machine Learning (ICML)
- Conference on Robot Learning (CoRL)
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)
- IEEE/CVF International Conference in Computer Vision (ICCV)
- European Conference in Computer Vision (ECCV)
- Interntional Journal of Robotics Research (IJRR)

- International Journal of Computer Vision (IJCV)
- Robotics Science and Systems (RSS)
- IEEE International Conference on Robotics and Automation (ICRA)
- IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)
- IEEE Transactions on Robotics (T-RO)
- IEEE Transactions on Image Processing
- NeuroImage
- PlosOne

Workshops Organized
- 3rd Workshop on Dexterous Manipulation, Robotics Science and Systems, 2025.
- 2nd Workshop on Dexterous Manipulation, Robotics Science and Systems, 2024.
- MyoSuite Workshop on Expanding Frontiers of Sim2Real: Robotics, biomechanics, plasma physics, chip design, and beyond, ICRA, 2024
- Sim-to-Real Robot Learning, Locomotion and Beyond, Conference on Robot Learning, 2022
- Aligning Robot Representations with Humans Workshop, Conference on Robot Learning, 2022
- Self-Supervised Learning Workshop, International Conference on Machine Learning, 2021.
- Self-Supervised Learning Workshop, Neural Information Processing Systems, 2021.

Committees Served
- National Science Foundation (NSF) Institute of Artificial Intelligence and Fundamental Interaction Communications Committee, 2022-2024.
- METEOR Postdoctoral Hiring Committee, Department of Electrical Engineering and Computer Science, MIT, 2021.
- Faculty Hiring Committee, Department of Electrical Engineering and Computer Science, MIT, 2021.
- National Science Foundation (NSF) Institute of Artificial Intelligence and Fundamental Interaction Postdoctoral Fellow Hiring Committee, 2020-21.
- Ph.D. Admissions Committee, MIT, 2019-.
- Ph.D. Admissions Committee, University of California Berkeley, 2012-14.

Other Activities
- Co-organizer, MIT Robotics Seminar, 2023-
- Organizer, Computational Sensorimotor Learning Seminar, 2020-

MIT Students Graduated

Ph.D. Thesis
- Tao Chen, *Advancing In-Hand Dexterous Manipulation via Machine Learning*, 2024
- Anurag Ajay, *Composing Foundation Models for Decision Making*, July 2024
- Anthony Simeonov, *Geometric Learning for Manipulating Scenes and Objects*, August 2024
- Minyoung Huh, *Parsimonious Principles of Deep Neural Networks,* August 2024
- Zhang-Wei Hong, *Generative Discovery via Reinforcement Learning*, December 2024
- Aviv Netanyahu, *Methods for Generalization Under Distribution Shift*, May 2025

MEng Thesis
- Shreya Karpoor, *Force Feedback and Tactile Sensing for Robotic Teleoperation of Contact Rich Manipulation Tasks,* EECS, 2024
- Andrew Jenkins*, Learning Sim-to-Real Robot Parkour from RGB Images,* BCS, 2024
- Andrei Spiride, *Representation Learning for Extrapolation via Bilinear Transduction*, EECS, 2024
- Jerry Mao, A Framework for LLM-based Lifelong Learning in Robot Manipulation, EECS, 2023
- Meenal Parakh, *Building a Language Conditioned System for 6-DoF Tabletop Manipulation*, EECS, 2023
- Alisha Fong, *NDF-Based API for Human-assisted Language Planning (HaLP)*, EECS, 2023
- Sathwik Karnik, *Towards Stable Reinforcement Learning in Non-Episodic Tasks*, EECS, 2023

- Matthew Stallone, *Monkey: A Distributed Orchestrator for a Virtual Pseudo-Homogenous Computational Cluster Consisting of Heterogeneous Sources*, EECS, 2022
- Albert Yue, *Success Classification for Object Navigation*, EECS, 2022
- Haokuan Luo, *Stubborn: A Strong Baseline for the Indoor Object Navigation Task*, EECS, 2022
- Eric Chen*, Understanding Bonus-Based Exploration in Reinforcement Learning*, EECS, 2021
- Joshua Gruenstien, *Residual Model Learning for Microrobot Control*, EECS, 2021
- Alon Kosowsky-Sachs, *Multimodal Robot Systems and Learning*, EECS, 2021
- Avery Lamp, *Monkey: Platform-Agnostic Hybrid-Cloud Cluster Compute Orchestration Designed for AI/ML*, EECS, 2021
- Sanja Simonvikj, *Towards Understanding Human-aligned Neural Representation in the Presence of Confounding Variables*, EECS, 2021
- Gabriel Margolis, *Learning Robust Terrain-Aware Locomotion*, EECS, 2021

Masters Thesis

- Ruben Castro, *Robotic Hand Series Elastic Actuator for Everyday Tasks: Requirements and Design*, Mechanical Engineering, 2024
- Andi Peng, *Leveraging Humans to Detect and Fix Representation Misalignment*, EECS, 2023
- Lara Zlokapa, *An Integrated Design Pipeline for Tactile Sensing Robotic Manipulators*, Mechanical Engineering, 2022

MIT Thesis Students Under Supervision

- Nitish Dashora, Ph.D. Thesis (2024-)
- Martin F. Peticco, Ph.D. Thesis (2024-)
- Jyothish Pari, Ph.D. Thesis (2023-)
- Seungwook Han, Ph.D. Thesis (2023-)
- Nolan Fey, Ph.D. Thesis (2023-)
- Antonia Bronars, Ph.D. Thesis (2023-)
- Younghyo Park, Ph.D. Thesis (2023-)
- Idan Shenfeld, Ph.D. Thesis (2022-)
- Gabe Margolis, Ph.D. Thesis (2021-)
- Richard Li, Ph.D. Thesis (2020-)

Outreach Workshops

- Artificial Intelligence Winter School, India (Dec 2022)
- Carnegie Mellon University – NITK Surathkal Winter School, India (Dec 2014; Link)
- Winter Hackathon, IIT Kanpur, India (Dec 2013; Video)