

# Yash Shukla

Medford, MA - 02155  
✉ [yash.shukla@tufts.edu](mailto:yash.shukla@tufts.edu)  
🌐 <https://yshukla.com/>

## Education

- 2020 – 2025 **Tufts University**, Medford, MA, United States  
Ph.D. in Computer Science, Advisor: *Prof. Jivko Sinapov*
- 2018 – 2020 **Worcester Polytechnic Institute**, Worcester, MA, United States  
Master of Science in Robotics Engineering
- 2014 – 2018 **Birla Institute of Technology and Science**, Pilani, India  
Bachelor of Engineering (Hons.) in Mechanical Engineering

## Research Interests

- Reinforcement Learning
- Robotics / Robot Learning
- Foundational Models (LLMs/VLMs)
- 3D Generative AI
- Sequential Decision Making
- Multi-modal learning

## Industry Internships

- Summer 2024 Research Intern, **Autodesk Research**
- Fall 2023, Research Intern, **Mitsubishi Electric Research Labs**, hosted by Siddarth Jain
- Spring 2024
- Summer 2022 Research Internship, **Georgia Tech Research Institute**, hosted by Robert Wright
- Summer 2019 Internship at Computer Vision Group, **MathWorks**
- Spring 2018 Internship at **Centre for AI and Robotics**, Bangalore

## Conference Publications

- IROS 2024 Pierrick Lorang, Shivam Goel, **Yash Shukla**, Patrik Zips, Matthias Scheutz, "A Framework for Neurosymbolic Goal-Conditioned Continual Learning for Open World Environments", *International Conference on Intelligent Robots and Systems*
- IROS 2024 Kei Ota, Devesh Jha, Siddarth Jain, William Yezazunis, Radu Corcodel, **Yash Shukla**, Antonia Bronars, Diego Romeres, "Autonomous Robotic Assembly: From Part Singulation to Precise Assembly", *International Conference on Intelligent Robots and Systems*
- RLC 2024 James Staley, Elaine Short, Shivam Goel, **Yash Shukla**, "Agent-Centric Human Demonstrations Train World Models", *Reinforcement Learning Conference*

- ICAPS 2024 **Yash Shukla**, Tanushree Burman, Abhishek Kulkarni, Robert Wright, Alvaro Velasquez, Jivko Sinapov, "[Logical Specifications-guided Dynamic Task Sampling for Reinforcement Learning Agents](#)", *International Conference on Automated Planning and Scheduling*
- AAMAS 2024 **Yash Shukla**, Wenchang Gao, Vasanth Sarathy, Alvaro Velasquez, Robert Wright, Jivko Sinapov, "[LgTS: Dynamic Task Sampling using LLM-generated sub-goals for Reinforcement Learning Agents](#)", *International Conference on Autonomous Agents and Multi-Agent Systems*
- IROS 2023 **Yash Shukla**, Bharat Kesari, Shivam Goel, Robert Wright, and Jivko Sinapov, "[A Framework for Few-Shot Policy Transfer through Observation Mapping and Behavior Cloning](#)", *International Conference on Intelligent Robots and Systems*
- ICAPS 2023 **Yash Shukla**, Abhishek Kulkarni, Robert Wright, Alvaro Velasquez, and Jivko Sinapov, "[Automaton-Guided Curriculum Generation for Reinforcement Learning Agents](#)", *International Conference on Automated Planning and Scheduling*
- AAMAS 2022 **Yash Shukla**, Christopher Thierauf, Ramtin Hosseini, Gyan Tatiya, Jivko Sinapov, "[ACuTE: Automatic Curriculum Transfer from Simple to Complex Environments](#)", *International Conference on Autonomous Agents and Multiagent Systems*
- ICDL 2022 Shivam Goel\*, **Yash Shukla\***, Vasanth Sarathy, Matthias Scheutz, and Jivko Sinapov, "[RAPid-Learn: A Framework for Learning to Recover for Handling Novelities in Open-World Environments](#)", *International Conference on Development and Learning* \* - Denotes equal contribution
- RSS 2022 **Yash Shukla**, Jivko Sinapov, "[A Framework for Curriculum Schema Transfer from Low-Fidelity to High-Fidelity Environments](#)", *Closing the Reality Gap in Sim2Real Transfer for Robotics at Robotics: Science and Systems*
- ICRA 2022 **Yash Shukla**, Kaleb Loar, Robert Wright, Jivko Sinapov, "[An Object-Oriented Approach for Generating Low-Fidelity Environments for Curriculum Schema Transfer](#)", *Scaling Robot Learning Workshop at International Conference on Robotics and Automation*
- IROS 2020 Gyan Tatiya, **Yash Shukla**, Michael Edegware and Jivko Sinapov, "[Haptic Knowledge Transfer Between Heterogeneous Robots using Kernel Manifold Alignment](#)", *International Conference on Intelligent Robots and Systems*

## Teaching

- Instructor Reinforcement Learning at Tufts University (Spring 2024, Fall 2023)
- Teaching Assistant Big Data at Tufts University (Fall 2020)
- Peer Learning Assistant Physics 101 at Worcester Polytechnic Institute (Fall 2019, Spring 2020)

## Invited Talks and Guest Lectures

- Oct 2022 Human-Robot Interaction Colloquium at Tufts University

Sept 2020 Robotics Seminar at Worcester Polytechnic Institute

## Grants

Travel AAMAS 2024 travel grant - USD 1600

Travel ICAPS 2023 travel grant - USD 1200

## Mentoring

Tufts Wenchang Gao, Bharat Kesari, Tanushree Burman, Anirudh Nair, Wei Wo Lin

## Service

Reviewer PRL at ICAPS 24, IROS 2024, RLC 2024, AAMAS 2023, ICRA 2024, RA-L 2024, Artificial Intelligence for Autonomous Driving at IJCAI-ECAI 2022

Student ICRA 2022, RLDM 2023 (Head volunteer)  
Volunteer

Program Artificial Intelligence for Autonomous Driving at IJCAI-ECAI 2022  
Committee

## References

- Prof. Jivko Sinapov  
Assistant Professor, CS  
Tufts University  
jivko.sinapov@tufts.edu
- Dr. Robert Wright  
Senior Research Scientist,  
Georgia Tech Research Inst.  
robert.wright@gtri.gatech.edu
- Dr. Alvaro Velasquez  
Program Manager  
DARPA  
alvaro.velasquez@darpa.mil