

# Sankalp (Sunny) Agrawal

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## EDUCATION

**The Ohio State University**, Columbus OH.

December 2025

Bachelor of Science in Electrical and Computer Engineering.

**GPA: 4.0/4.0**

- Dean's List (all semesters), Minors: Robotics and Autonomous Systems, Physics

## COURSEWORK

**Graduate:** Machine Learning, Real Time Robotics, State-Space Control, Machine Learning for Data Analysis, Autonomous Vehicles

## TECHNICAL SKILLS

**Programming Languages & Tools:** Python, C++, MATLAB, ROS, Linux, Git, SolidWorks

**Libraries:** PyTorch, TensorFlow, scikit-learn, JAX, MuJoCo, IsaacGym, NumPy, SciPy, OpenCV

## PUBLICATIONS

[1] **S. Agrawal\***, J. Seo\*, K. Nakamura, R. Tian, and A. Bajcsy, 'AnySafe: Adapting Latent Safety Filters at Runtime via Safety Constraint Parameterization in the Latent Space', *ICRA 2026 (in submission)*

[Paper](#) | [Website](#)

[2] C. Peng, Z. Zhang, S. Gong, **S. Agrawal**, K. A. Redmill, and A. Hereid, 'Reinforcement Learning with Data Bootstrapping for Dynamic Subgoal Pursuit in Humanoid Robot Navigation', *ICRA 2026 (in submission)*

[Paper](#)

## RESEARCH & PROFESSIONAL EXPERIENCE

**Carnegie Mellon University** | [Interactive and Trustworthy Robotics Lab](#) | Advisor: [Andrea Bajcsy](#)

Undergraduate Research Fellow – Robotics Institute Summer Scholar ([RISS](#))

May 2025 – Present

- Enhanced world-model based robot safety methods by developing a new approach that uses images of potential failures to adapt to changing safety requirements, significantly improving real-world adaptability.
- Implemented reinforcement learning algorithms, conducted hardware experiments and wrote a first-author ICRA 2026 submission.

**University of Southern California** | [Learning and Interactive Robot Autonomy Lab](#) | Advisor: [Erdem Bıyık](#)

Amazon Research Fellow – Viterbi Summer Undergraduate Research Experience ([SURE](#))

May 2024 – Aug 2025

- Investigated improving the sample-efficiency of Bayes-Adaptive Meta-Reinforcement Learning by designing, testing, and analyzing new partially informed training strategies.
- Implemented reinforcement learning algorithms from scratch, validated them through experiments, and maintained a collaborative GitHub codebase for the research team.

**The Ohio State University** | [Cyberbotics Lab](#) | Advisor: [Ayonga Hereid](#)

Undergraduate Research Assistant

September 2022 – Present

- Researched reinforcement learning methods for sub-goal planning for humanoid navigation and contributed on ICRA 2026 paper submission.

Undergraduate Research Fellow – Summer Research Opportunities Program ([SROP](#))

May 2023 – July 2023

- Investigated mass parallel training for humanoid locomotion, dramatically decreasing training times.

**Bilstein thyssenkrupp**, Industrial Robotics Intern

May 2022 – August 2022

- Automated production-line processes by integrating collaborative UR 6-axis robot manipulators, applying mechatronics and robotic automation principles to improve reliability and throughput.

## POSTER PRESENTATIONS

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<b>AnySafe: A Generalizable Framework for Constraint-Conditioned Latent Safety Analysis</b>	August 2025
<ul style="list-style-type: none"><li>Presented at the 2025 CMU RISS Research Showcase</li></ul>	
<b>Using Partially Observed Belief States for Bayes-Adaptive Meta-RL</b>	August 2024
<ul style="list-style-type: none"><li>Presented at the 2024 USC SURE Research Showcase</li></ul>	
<b>Investigating Mass Parallel Reinforcement Learning to Train Bipedal Robot Locomotion</b>	April 2024
<ul style="list-style-type: none"><li>Presented at the 2024 Ohio State Spring Undergraduate Research Festival (SURF)</li></ul>	

## HONORS & AWARDS

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<b>Google Undergraduate Research Fellow at Carnegie Mellon University</b>	Summer 2025
<ul style="list-style-type: none"><li>Member of the Carnegie Mellon University RISS 2025 Cohort (1 of 39 Scholars).</li><li>Awarded scholarship from <b>Google Robotics</b> to conduct research on robot safety.</li></ul>	
<b>Amazon Undergraduate Research Fellow at University of Southern California Viterbi</b>	Summer 2024
<ul style="list-style-type: none"><li>Member of the USC Viterbi SURE 2024 Cohort (1 of 38 Scholars).</li><li>Awarded scholarship from <b>Amazon</b> to conduct research on Bayes-Adaptive Meta-RL methods.</li></ul>	
<b>Dean's List</b>	All Semesters
<b>Ohio State Maximus Scholarship</b>	May 2022
<b>IEEE Scholarship</b>	May 2021

## LEADERSHIP & INVOLVEMENT

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<b>Black x Bold Magazine, Senior Photographer</b>	August 2023 – Present
<ul style="list-style-type: none"><li>Serve on the leadership team as Senior Photographer, contributing to magazine layout decisions and producing photography featured in five issues, including three cover photos.</li><li>Highlight multicultural student organizations through campus photography projects and lead outreach efforts that strengthen visibility, community engagement, and cross-cultural awareness.</li></ul>	
<b>Buckeye Capture, Founder</b>	January 2024 – Present
<ul style="list-style-type: none"><li>Founded and lead a 10-member photography team that provides free professional media support to student organizations.</li><li>Partnered with more than 25 clubs to deliver high-quality branding and outreach content, strengthening campus visibility and engagement.</li></ul>	

## TEACHING & SERVICE

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ECE 5463: Introduction to Real Time Robotics Systems (Graduate), <i>Teaching Assistant</i>	Spring 2024
<b>Ohio State Mathematics and Statistics Learning Center,</b> Math Tutor	January 2023 – April 2024
<ul style="list-style-type: none"><li>Tutored over twenty students in Linear Algebra and Differential Equations through weekly appointments.</li><li>Learned to effectively communicate and explain complex ideas.</li></ul>	