

# Atiksh Bhardwaj

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## Education

### Cornell University, College of Engineering

Bachelor of Science in Computer Science and Mathematics

Ithaca, NY

August 2022-December 2025

GPA: 3.97/4.00

**Honors and Awards:** Dean's Honors List and On Track for Honors Program

**Related Courses:** Deep Learning for Robotics, Numerical Analysis of Differential Equations, Algorithms, Reinforcement Learning, Machine Learning, Computer Vision, Artificial Intelligence, Functional Programming, Systems and Organization, Discrete Math, Computational Algebra, Honors Data Structures, Abstract Algebra

## Technical Skills

- **Back-end Development Tools:** Python, Java, OCaml, MATLAB, Simulink, ROS C, C++, SQL
- **Front-end Development Tools:** Electron, HTML, CSS, JavaScript, Qt
- **Developer Tools:** Git, GitHub, VS Code, PyTorch, TensorFlow, OpenCV, SolidWorks, AutoCAD
- **Cloud Development Tools:** AWS, Azure, Google Cloud
- **Computer:** Linux, Windows, MacOS Microsoft Suite, Blender, CUDA, LLMs, Docker

## Publications | [Google Scholar](#)

X-Diffusion: Training Diffusion Policies on Cross-Embodiment Human Demonstration [\[arxiv\]](#) [\[website\]](#)

Maximus A. Pace\*, Prithwish Dan\*, Chuanruo Ning, **Atiksh Bhardwaj**, et. al, Wei-Chiu Ma†, Kushal Kedia†  
Under Review at **ICRA 2026**

A Smooth Sea Never Made a Skilled SAILOR: Robust Imitation via Learning to Search [\[arxiv\]](#) [\[website\]](#) [\[code\]](#)

Arnav Kumar Jain\*, Vibhakar Mohta\*, Subin Kim, **Atiksh Bhardwaj**, et. al, Sanjiban Choudhury, Gokul Swamy  
Published as **Spotlight Paper at NeurIPS 2025** (Top 3% of papers; 688 selected out of 21544 submissions)

MOSAIC: A Modular System for Assistive and Interactive Cooking [\[arxiv\]](#) [\[website\]](#) [\[thread\]](#)

Yuki Wang\*, Kushal Kedia\*, Juntao Ren\*, Rahma Abdullah, **Atiksh Bhardwaj**, et. al, Sanjiban Choudhury  
Published at **CoRL 2024**

**Best Paper at ICRA 2024 VLNMN Workshop and Best Poster at ICRA 2024 MoMa Workshop**

InterACT: Transformer Models for Human Intent Prediction Condition on Robot Action [\[arxiv\]](#) [\[website\]](#) [\[code\]](#) [\[data\]](#)

Kushal Kedia, **Atiksh Bhardwaj**, Prithwish Dan, Sanjiban Choudhury | Published at **ICRA 2024**

ManiCast: Collaborative Manipulation with Cost-Aware Human Forecasting [\[arxiv\]](#) [\[website\]](#) [\[code\]](#) [\[data\]](#)

Kushal Kedia, Prithwish Dan, **Atiksh Bhardwaj**, Sanjiban Choudhury | Published at **CoRL 2023**

## Experience

### Research Assistant

January 2026-Present

- Advised by Prof. Preston Culbertson at the PRAXIS Lab at Cornell University building dynamics into VLAs
- Leading a project with 2 graduate students advised by Prof. Preston Culbertson and Prof. Wei-Chiu Ma

### Undergraduate Robotics and Machine Learning Researcher

May 2023-December 2025

- Advised by Prof. Sanjiban Choudhury at [PoRTaL Lab](#) at Cornell University
- Interned under the Bowers Undergraduate Research Experience during summer 2023 for a **\$5000 fellowship** and summer 2024 for a **\$7000 fellowship**

### Texas Instruments Software Engineering Internship

May-August 2025

- Optimized various recurrent neural networks on internal hardware via open-source TVM code generation
- Improved performance in code generation by 13x and nearly 4x versus competitor and open-source hardware

### Teaching Assistant

August 2023-Present

- Machine Learning (Fall 2025), Reinforcement Learning (Spring 2025), Robot Learning (Fall 2024), Artificial Intelligence (Spring 2024), Functional Programming (Fall 2023)

### Brains4Drones Internship

May-August 2022

- Created automatic panorama stitcher to make LIDAR maps through OpenCV and C++ based on drone movement
- Coded GUI application in JavaScript for line workers to view footage and automated Lidar Map in real-time

## Projects

### BigRed//Hacks

November 2022

- Collaborated with team of 4 to create NFTTree as an open marketplace for users to grow trees via NFTs
- Winner of Blockchain and Web Track sponsored by PI Network