

# Sujay Bajracharya

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## EDUCATION

### Carnegie Mellon University – School of Computer Science

Master of Science in Robotics

Pittsburgh, PA

August 2021

#### Relevant Courses

- Machine Learning
- Computer Vision
- Kinematics, Dynamics, and Control

### Cleveland State University

Bachelor of Science in Computer Science. GPA: 3.96

Cleveland, OH

May 2019

Washkewicz College of Engineering Student Achievement Award (Computer Science)

## EXPERIENCE

### Research Assistant

Oct 2019 – Present

Carnegie Mellon University – RPAD

Pittsburgh, PA

- Devised deep reinforcement learning approach for cloth manipulation using tactile sensing
- Implemented RL environment using Sawyer robot arm for real-robot training and evaluation
- Contributed to submitted CoRL 2020 paper on Latent Action Space for Offline Reinforcement Learning

### Robotics Researcher

Jun 2018 – Aug 2018

University of Wisconsin-Stout

Menomonie, WI

- Developed meal assistance system for 6DOF robot arm to improve autonomy for users with disabilities
- Implemented robot commands utilizing Kinect camera for face tracking, gesture, and speech recognition
- Evaluated system on volunteers with upper body mobility impairments

### Research Assistant

May 2017 – Jun 2018

Cleveland State University - Washkewicz College of Engineering

Cleveland, OH

- Implemented dialog system with semantic parser and probabilistic dialog manager.
- Aided in navigation system implementation for mobile delivery robot using ROS in Python and C++
- Published at RSS 2018 Workshop on human-robot dialog for delivery robots to improve intention estimation

## PUBLICATION

Saeid Amiri, Sujay Bajracharya, Cihangir Goktolga, Jesse Thomason, and Shiqi Zhang

2019

Augmenting Knowledge through Statistical, Goal-oriented Human-Robot Dialog

*IROS 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems*

Sujay Bajracharya, Saeid Amiri, Jesse Thomason, and Shiqi Zhang

2018

Simultaneous Intention Estimation and Knowledge Augmentation via Human-Robot Dialog

*RSS 2018 Workshop on Models and Representations for Natural Human-Robot Communication*

## SKILLS

- Programming Languages: Python, C, C++, MATLAB
- Robotics: ROS, PyTorch, OpenCV, MoveIt, Gazebo, MuJoCo
- Other: Unix ecosystem, Git, LaTeX