Michael Piseno

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Education

2021 - 2023 **Stanford University**
MS Computer Science
GPA: 4.0

2017 - 2021 **Georgia Institute of Technology**
BS Computer Science with highest honors, Minor in Mathematics
Major GPA: 4.0, Overall GPA: 3.82

Research Experience

Winter 2024 - Present **The Movement Lab** RESEARCH ASSISTANT

- Topic: Using diffusion policies to learn physics-based models of human motion.
- Principal Investigator: Prof. Karen Liu.
- Used diffusion policies to learn torque control of a human character in a physics-based simulator, which presents new challenges due to high-frequency control.
- Result: Work in progress and is an intended submission to SIGGRAPH.

Spring 2022 - Fall 2023 **Robotics @ Google** RESEARCH INTERN

- Topic: Natural-looking locomotion policies for humanoid robots.
- Principal Investigator: Prof. Koushil Sreenath, Hybrid Robotics Lab at UC Berkeley.
- Learned a multi-task controller for natural-looking humanoid locomotion using Adversarial Motion Priors (AMP) and deployed the controller on a real life-sized humanoid robot.
- Result: This work has resulted in a first-author paper. Project page.

Winter 2022 - Winter 2023 **Intelligent and Interactive Autonomous Systems Group (ILIAD)** RESEARCH ASSISTANT

- Topic: Using language goals for robot control policies.
- Principal Investigator: Prof. Dorsa Sadigh
- Fine-tuned CLIP on robot demonstration data to enforce structure in the CLIP joint embedding space for use in downstream manipulation tasks.

Summer 2021 **IBM Research** RESEARCH INTERN

- Topic: Applying off-policy RL algorithms to optimize millimeter-wave communications in 5G cellular network.
- Supervisor: Dr. Alberto Valdes Garcia.
- Developed a system that learns to control the direction and power levels of multiple 5G cell towers in a simulated environment.

Industry Experience

Summer 2020   **Dropbox** Software Engineer Intern
- Topic: chrome extension for organizing workflow
- Create the ML infrastructure for predicting tabs that are considered clutter and can therefore be closed.
- Build the infrastructure for client-server interaction in Typescript, train the ML model using Python, and display the results on the front end using ReactJS.

Winter 2020   **Facebook AI Research** Software Engineer Intern
- Topic: software development for AI Habitat, a simulator for training embodied AI agents.
- Supervisor: Prof. Dhruv Batra
- Create a tool to collect image data from within the simulator, train semantic segmentation models on the image data, and develop a renderer to color semantish meshes.

Summer 2019   **Amazon** Software Engineer Intern
- Topic: methods for image segmentation along linear boundaries.
- Supervisor: Michael Lou
- Develop a data labeling tool and implemented and trained novel vision architectures in Pytorch.

Summer 2018 - Fall 2018   **Georgia Tech Research Institute** Research Intern
- Topic: classify noisy radio signals using deep learning.
- Supervisor: Dr. Jason Zutty
- Implement convolutional and recurrent architectures as primitives into an existing optimization library based on genetic programming.

Teaching Experience

Fall 2021   **Stanford University** Course Assistant
- Course: CS 221: Artificial Intelligence: Principles and Techniques.
- Responsibilities: managing course content, hosting office hours, and grading assignments.

Fall 2019 - Spring 2021   **Georgia Institute of Technology** Teaching Assistant
- Course: CS 7643: Deep Learning. Topics include vision and language models, generative models, and reinforcement learning.
- Created and maintained course material, graded assignments, and assisted students in office hours.

Awards and Honors

April 2022   **National Defense Science and Engineering Graduate (NDSEG) Fellowship**
Graduate fellowship award to pursue research on intelligent robotics. Acceptance rate: 2%

May 2021   **Highest Honors, BS Computer Science, Georgia Institute of Technology**
Graduated from the Georgia Institute of Technology with a BS in Computer Science with highest honors.

July 2020   **Intel SHPE Undergraduate Scholarship**
Scholarship sponsored by Intel awarded through the Society of Hispanic Professional Engineers (SHPE). More info here.

July 2020   **Tapia Conference Scholarship**
Awarded a scholarship to cover the cost of attendance to the ACM Richard Tapia Conference.

July 2020   **LSAMP Scholarship**
Scholarship awarded primarily to underrepresented students in STEM. Awarded by the LSAMP program through Georgia Tech.

April 2020   **Generation Google Scholarship**
Awarded by Google for accomplishment in Computer Science. More info here.

Nov 2019   **Cisco Enterprise Scholarship**
Awarded a Cisco Enterprise Business Group Scholarship through a program in Georgia Tech's College of Computing.

Aug 2019   **SHPE Undergraduate Scholarship**
Awarded a SHPE Undergraduate Scholarship for my involvement in the Society of Hispanic Professional Engineers (SHPE). This scholarship was awarded to roughly three dozen students.