# MAXIMUS PACE

(203) 451-8151  $\Leftrightarrow$  map438@cornell.edu https://www.maximuspace.com

#### **EDUCATION**

# Cornell University

August, 2024 - May, 2026

Master of Science in Computer Science

# Cornell University

September, 2020 - May, 2024

Bachelor of Arts in Computer Science, Mathematics. Summa cum laude

GPA: 4.10

Course work: Robot Learning, Machine Learning, Artificial Intelligence, Computer Vision, Algorithms, Honors Object Oriented Programming & Data Structures, Functional Programming, Compilers & Formal Languages, Honors Linear Algebra, Abstract Algebra, Probability, Honors Real Analysis, Complex Analysis

### **PUBLICATIONS**

- Prithwish Dan, Kushal Kedia, Angela Chao, Edward Duan, Maximus Adrian Pace, Wei-Chiu Ma, Sanjiban Choudhury. X-Sim: Cross-Embodiment Learning via Real-to-Sim-to-Real. *Under Review for the 9th Annual Conference on Robot Learning (CoRL)*, 2025. [Website]
- Kushal Kedia, Prithwish Dan, Angela Chao, **Max Pace**, and Sanjiban Choudhury. One-shot imitation under mismatched execution. *International Conference on Robotics and Automation (ICRA)*, 2025. [Website]
- Huaxiaoyue Wang, Nathaniel Chin, Gonzalo Gonzalez-Pumariega, Xiangwan Sun, Neha Sunkara, **Maximus Adrian Pace**, Jeannette Bohg, Sanjiban Choudhury. APRICOT: Active Preference Learning and Constraint-Aware Task Planning with LLMs. 8th Annual Conference on Robot Learning (CoRL), 2024. [Website]
- Huaxiaoyue Wang, Kushal Kedia, Juntao Ren, Rahma Abdullah, Atiksh Bhardwaj, Angela Chao, Kelly Y Chen, Nathaniel Chin, Prithwish Dan, Xinyi Fan, Gonzalo Gonzalez-Pumariega, Aditya Kompella, Maximus Adrian Pace, Yash Sharma, Xiangwan Sun, Neha Sunkara, Sanjiban Choudhury. MOSAIC: A Modular System for Assistive and Interactive Cooking. 8th Annual Conference on Robot Learning (CoRL), 2024. [Website]
- Yash Sharma, Yuki Wang, Kelly Chen, **Maximus Pace**, Sanjiban Choudhury. Video2Demo: Grounding Videos in State-Action Demonstrations. [OpenReview]

# RESEARCH EXPERIENCE

### PoRTaL Lab, Cornell University Professor Sanjiban Choudhury

March, 2023 - Present

- Learned robot skills from actionless human videos containing infeasible demos to deploy on a 7DoF arm
- Built a Real2Sim pipeline to convert a human video demo into RL objective in simulation for successful Real2Sim2Real approach
- Enabled a mobile manipulator robot to identify and grasp objects using visuomotor behavioral cloning over a multimodal action space

# PROFESSIONAL EXPERIENCE

# Founder and CTO of Synopsis

August, 2022 - Present

- Developed front-end and back-end for automatically generating story-based data science slide decks to make corporate research communication engaging for 15 users
- Researched business viability and conducted 80 customer discovery interviews to test hypotheses
- Raised \$15,000 in grants and pitched at Autodesk Gallery through eLab business accelerator

# Controls Software Engineer on Cornell Mars Rover

- November, 2020 June, 2024
- Trained segmentation model to identify keyboards and key locations to enable autonomous typing
- Overhauled classification model for rock images, improving validation accuracy from 30% to 70%
- Rewrote vision systems for ROS 2, integrating newer frameworks and enhancing cameras for competition
- Operated rover in University Rover Challenge 2023, adapting to controller malfunctions by manipulating drives through ROS command line and resolving camera failures ad hoc, ensuring continued performance

# Software Engineer Intern at Guidewire Software

May, 2022 - August, 2022

- Built asset management tool to reveal abandoned curation assets, saving \$1200/month in AWS costs
- Expanded data curation API in Kotlin to expose data relationships, enabling accessibility for 30 developers
- Restructured customer data platform class setup to reduce data redundancy, creating a cleaner interface
- Created SQL query tests for join statements for better reliability in production

# Mobile Developer Intern at rapStudy

May, 2021 - September, 2021

- Led development of song player for new React Native app for school-sponsored use by over 5000 students
- Created seamless synchronization system for aligning over 200 songs with their lyrics in real-time

#### TEACHING EXPERIENCE

#### Discrete Structures TA

August, 2021 - December, 2021; August, 2022 - May, 2024

- Promoted to Head TA in Spring, 2023 with Lecturer Anke van Zuylen
- Rated average overall score of 4.94/5.0 from 17 students on anonymous feedback survey
- Led discussion sections of 30 students and held office hours assisting 30 students per week on problem sets
- Created homework and exam rubrics and led grading sessions of 14 TAs to grade 430 submissions

### Functional Programming and Data Structures Consultant

January, 2022 - May, 2022

- Held office hours assisting 20 students per week with coding assignments and exam preparation
- Graded 10 submissions for each programming assignment for accuracy and code quality

# GRANTS AND AWARDS

# Bowers Undergraduate Research Experience & Summer Experience Grant

May, 2023

• Granted \$4,599 for conducting computer science research over the summer on imitation learning

# **Excellence as Course Staff Nomination**

May, 2023

• Nominated by faculty for hard work and strong performance as a TA in a Bowers CIS course

# Cane Entrepreneurship Scholars

May, 2023

• Awarded \$5,000 for the development and growth of a unique startup

### Beck Entrepreneurship Fellowship

December, 2022

• Awarded \$5,000 for strong demonstrated interest and involvement in entrepreneurship, academic excellence, and intention to pursue a startup idea during the summer

# TECHNICAL SKILLS

Python (PyTorch, ROS, OpenCV, NumPy, MatPlotLib), Java, OCaml, JavaScript

# REFERENCES

Sanjiban Choudhury, Ph.D., Assistant Professor at Cornell University sanjibanc@cornell.edu

Anke van Zuylen, Ph.D., Senior Lecturer at Cornell University avz2@cornell.edu

Gregory Ray, Ph.D., Entrepreneur in Residence and Visiting Lecturer at Cornell University gcr45@cornell.edu

Matt Halstead, Staff Software Engineer at Guidewire Software Inc. mhalstead@guidewire.com