

KATELYN MORRISON

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EDUCATION

University of Pittsburgh

B.S. in Computer Science & Certificate in Sustainability
Overall GPA: 3.7

August 2018 - May 2021

Moravian College

General Education Studies
Overall GPA: 3.91

August 2017 - May 2018

PUBLICATIONS

Katelyn Morrison, Daniel Yates, Maya Roman, and William W. Clark. 2020. “Using Object Tracking Techniques to Non-Invasively Measure Thoracic Rotation Range of Motion”. In Proceedings of ACM ICMI (ICMI '20). *To Appear.*

RESEARCH & WORK EXPERIENCE

Undergraduate Research Assistant

SmaSH (Smart Sensing for Humans) Lab

August 2020 - Present

Carnegie Mellon University - HCII

Created Android Application that detects whether the phone user is driving or a passenger in a moving vehicle by accessing the camera feed in the background.

Data Science Intern

Lab41

June 2020 - August 2020

In-Q-Tel

Created Plotly Dash App to visualize twitter data related to COVID-19. Performed experiments to identify a Python package that accurately detects the language of a Tweet. Lead a discussion on “Disinformation and Misinformation on Twitter during the Novel Coronavirus Outbreak” by B. Huang and Dr. Kathleen Carley at Machine Learning Journal Club.

Undergraduate Research Assistant

Pitt XProjects

August 2019 - Present

University of Pittsburgh - Swanson School of Engineering

Worked on an interdisciplinary team to design a system that non-invasively calculates thoracic rotation range of motion using computer vision techniques.

Student Researcher

Center for Latin America Studies

January 2020 - May 2020

University of Pittsburgh

Learned formal research methods such as creating a researchable question and creating surveys in Spanish. Primary motivation of project was to understand how adults in Manizales, Colombia assess and evaluate the state and quality of the current bike sharing system Manizales En Bici to see how to increase ridership.

POSTERS & PRESENTATIONS

Dual Live Angle Calculation to Determine Flexibility of Torso Using Computer Vision

Science2019: Pitt’s Annual Celebration of Science & Technology

Impact of Signage on First Year Residence Hall Recycling

13th Annual Moravian College Student Scholarship & Creative Endeavors Day

TEACHING

Undergraduate Teaching Assistant September 2020 - Present
School for Computing and Information *University of Pittsburgh*

UTA for Intro to CS for Scientists. Hold weekly lab sessions to walk through lab instructions, introduce examples of any concepts necessary that students are struggling with, hold office hours, and review students' labs for completion and correctness.

Workshop Lead & Student Technician August 2018 - May 2020
University Center for Teaching and Learning *University of Pittsburgh*

Makerspace workshop designer and leader for vinyl cutting. Responsible to teach any makerspace user how to use 3D Resin and Filament printers, laser cutters, Virtual Reality systems, and other minor tools. Helped create and formalize new student worker policy handbook as well as makerspace user handbook.

Tech Camp Instructor June 2018 - August 2018

Camp instructor for students ranging from the age 5 - 18. Taught programming concepts in Java, C++, HTML and JavaScript (using MicroBits), and Scratch. Responsible to create lesson plans, track learning progress of students and evaluate skills learned through a final project presentation.

LEADERSHIP

Doctoral Consortium Co-Organizer November 2019 - Present
Computational Sustainability Doctoral Consortium *CompSustNet*

Contributed to grant writing to receive NSF funds for future CompSust DC events. Organize and advertise the event as well as review abstract submissions on Microsoft CMT.

Sustainability Project Liason October 2018 - May 2019
Green Fund Advisory Board *University of Pittsburgh Student Office of Sustainability*

Assisted project leaders in funding and execution of running Zero Waste Events. Gained a strong understanding of the Sustainability Initiatives at Pitt. Evaluated project proposals for funding based on potential impact on campus and contributions to campus sustainability.

Student Government Representative November 2017 - May 2018
United Student Government *Moravian College*

Elected student government representative to lead sustainability initiatives on campus. Participated in design conversations with Sysco during dining hall upgrades.

HONORS & ACHIEVEMENTS

Nationality Rooms Study Abroad Scholarship	February 2020
Pitt Study Abroad Office Scholarship	February 2020
Adobe Research Women in Technology Scholarship Finalist	November 2019
Stanford University Innovation Fellowship	October 2019 - May 2020
United Nations Academic Impact Group Millennium Fellowship	August 2019 - Dec. 2019
Emerging Leaders Scholarship Program (Moravian College)	August 2017 - May 2018

SKILLS

Experienced: Python, Java, HTML, CSS **Intermediate:** R, \LaTeX , JavaScript, C, C++ **Novice:** PHP, SQL **Frameworks, APIs, Misc.:** Plotly, Plotly Dash, NumPy, Pandas, GeoPandas, OpenCV, Bootstrap, Google Maps API, Android Studio, MAMP