KATELYN MORRISON

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EDUCATION

University of Pittsburgh   *August 2018 - May 2021*
B.S. in Computer Science & Certificate in Sustainability *(GPA: 3.7)*

Moravian College   *August 2017 - May 2018*
General Education Studies *(GPA: 3.91)*

PUBLICATIONS

Katelyn Morrison. 2020. "Reducing Discrimination in Learning Algorithms for Social Good in Sociotechnical Systems". AI for Social Good Workshop at the International Joint Conference on Artificial Intelligence (IJCAI) 2020. *To Present on January 8, 2021.*

Morrison, Katelyn, Daniel Yates, and Maya Roman, William W. Clark. "Using Object Tracking Techniques to Non-Invasively Measure Thoracic Rotation Range of Motion." In Adjunct Proceedings of the ACM International Conference on Multimodal Interaction (ICMI 2020), Utrecht, the Netherlands.

RESEARCH & WORK EXPERIENCE

Undergraduate Research Assistant   August 2020 - December 2020
SmaSH (Smart Sensing for Humans) Lab   *Carnegie Mellon University - HCII*

- Created an Android application that collects and labels sensor and video data when it detects that the user is in a vehicle.
- Working on detecting if the user is a driver or passenger using contextual cues from the camera in a random forest binary classifier.

Data Science Intern   June 2020 - August 2020
IQTLabs   *In-Q-Tel*

- Enabled "information epidemiology" by making a Plotly Dash App to explore the life cycle of a claim or narrative about COVID-19 on Twitter in a spatial-temporal visualization.
- Performed experiments to find a Python package that accurately detects the language of a Tweet.

Undergraduate Research Assistant   August 2019 - October 2020
Pitt XProjects   *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   January 2020 - May 2020
Center for Latin America Studies   *University of Pittsburgh*

- Created research project to understand how adults in Manizales, Colombia assess and evaluate the state and quality of the current bike sharing system, Manizales En Bici.

POSTERS & PRESENTATIONS

Evaluating the Fairness of Bike Sharing Programs Using Geospatial Analysis *Computational Sustainability Doctoral Consortium 2020*

Using Object Tracking Techniques to Non-Invasively Measure Thoracic Rotation Range of Motion *Face and Gesture Analysis for Health Informatics Workshop at ACM ICMI 2020*

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*

- Completed projects and created presentations to break down the project directions in a digestible format.
- Held weekly office hours to provide more examples and guide students towards good debugging practices.

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 new student worker policy handbook as well as makerspace user handbook.

Tech Camp Instructor	June 2018 - August 2018
iD Tech Camps	*Villanova University*

- 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 submit an NSF grant for funding future events.
- Created the talk schedule; moderated talks, tutorials, and Q&A sessions.

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.
- 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 iniatives 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++, ArcGIS **Novice**: PHP, SQL **Frameworks, APIs, Misc.**: Plotly, Dash, NumPy, Pandas, GeoPandas, OpenCV, Bootstrap, Google Maps API, Android Studio, MAMP