KATELYN MORRISON

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EDUCATION

University of Pittsburgh   *August 2018 - May 2021*
B.S. in Computer Science & Certificate in Sustainability
GPA: 3.731   Major GPA: 3.568

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

PUBLICATIONS

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

Katelyn Morrison, Daniel Yates, Maya Roman, and 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, HCII   *Carnegie Mellon University*

- 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 an open source 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, Swanson School of Engineering   *University of Pittsburgh*

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

Student Researcher   January 2020 - May 2020
Center for Latin American Studies   *University of Pittsburgh*

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

Software Developer Intern   May 2019 - August 2019
Digital Center of Excellence   *PPG Industries*

- Created a form using JavaScript on ServiceNow to facilitate access to financial records.
- Made a prototype chatbot using ServiceNow's workflow to determine its value and potential.

TEACHING

Undergraduate Teaching Assistant
September 2020 - Present

School for Computing and Information
University of Pittsburgh

- Created answer keys for class projects and created presentations to break down the project directions in a digestible format for an introductory programming in Python course.
- 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

- Initiated the makerspace workshop series and lead the workshop for vinyl cutting.
- Taught students, faculty, and staff how to use 3D resin and filament printers, laser cutters, virtual reality systems, and other equipment.
- 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.
- Created lesson plans, tracked learning progress of students and evaluated 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.

Women in Computer Science Club Vice President
April 2020 - Present

School of Computing and Information
University of Pittsburgh

- Created and led a workshop on gender diversity in open source development on GitHub.
- Assisted the club in recruiting members and promoting diversity and inclusion.

Spanish Club Events Coordinator
August 2019 - May 2020

Spanish Department
University of Pittsburgh

- Planned a virtual reality tour of Latin America for the Pitt Latin American & Caribbean Festival.

Sustainability Project Liason
October 2018 - May 2019

Green Fund Advisory Board, Student Office of Sustainability
University of Pittsburgh

- Assisted project leaders in funding and running zero waste events.
- Evaluated project proposals for funding based on potential impact 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++, ArcGIS
Novice: PHP, SQL **Frameworks, APIs, Misc.:** Plotly, Dash, NumPy, Pandas, GeoPandas, OpenCV, Bootstrap, MAMP, Google Maps API, Google Firebase, Android Studio

POSTERS & PRESENTATIONS

"Reducing Discrimination in Learning Algorithms for Social Good in Sociotechnical Systems." *To be presented at AI for Social Good Workshop at IJCAI 2020.*

"DriveSense: Android Application to Detect and Label Phone Usage in Vehicles Using the Front Camera." *University of Pittsburgh Computer Science Capstone Presentation 2020.*

"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, ACM ICMI 2020.*

"Civic Hacking & Urban Informatics: Mapping Data with GeoPandas" *PyOhio 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 2019.*