Melanie McCord

PhD Student

College of William and Mary

✉ mpmccord@wm.edu | ⌂ melaniemccord.com | mpmccord | melanie-mccord

Education

College of William and Mary   *Williamsburg, VA*
PhD Student in Computer Science   *August 2023 - Present*
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New College of Florida   *Sarasota, FL*
Bachelor of Arts in Computer Science, Minor in Statistics   *May 2023*
• Honors Thesis: Medical Relevancy of Cancer-Related Tweets and Their Relationship with Misinformation

Miami Dade College   *Miami, FL*
Associate of Arts   *August 2019*
• Dean's List for all full-time semesters

Relevant Coursework: Ubiquitous & Mobile Computing, Systems Security, Applied Time Series Analysis, Categorical Data Analysis, R for Data Science, Computer Vision, Distributed Computing, Linear Algebra, Machine Learning

Research Experience

NicheVision Forensics   *Summer 2023*
Research Intern   *Akron, OH*
• Analyzed DNA sequencing mixture data in Python using the Scikit-Learn and Pandas libraries.
• Estimated the number of contributors using random forest and decision tree models.

Pacific Northwest National Laboratory   *Summer 2022*
SULI Research Intern   *Richland, WA*
• Preprocessed image data using AWS SageMaker, OpenCV, and TensorFlow.
• Implemented object detection and part-of-speech tagging.

Penn State University   *Summer 2021*
Research Intern   *State College, PA*
• Preprocessed text data in Python, extracted tweets from Twitter API, and detected COVID-19 misinformation.
• Created a website with Flask backend and deployed the model to detect fake news given a URL.

Projects

COVID-19 Dashboard   *April 2021*
• Used Angular an Firebase to develop a scientific literature page about COVID-19 vaccines

Stress Analysis on Reddit   *Fall 2021*
• Visualized and analyzed stress-related Reddit data using the Tidyverse and Tidytext R packages.

Fanfiction vs Classic Literature   *Spring 2022*
• Set timelines, stretch goals, and determined analyses for a group of 5 to analyze textual differences.

Teaching Experience

Teaching Assistantships

CSCI140: Programming for Data Science (William and Mary)   *Fall 2023*

CSCI2400: Object-Oriented Programming (New College of Florida) *Spring 2023*

STAN2800: Dealing with Data II (New College of Florida)   *Spring 2023*

CSCI2400: R for Data Science (New College of Florida)   *Fall 2022*

CSCI2400: Dealing with Data I (New College of Florida)   *Spring 2022*

Publications and Presentations

Posters

1. McCord, M., & Hamid, F. (2023). Medical Relevancy of Cancer-Related Tweets and Its Relation to Misinformation. *The International FLAIRS Conference Proceedings*, *36*. https://doi.org/10.32473/flairs.36.133364

Awards & Achievements

Scholarships

2021	Grace Hopper Conference Scholar
2021	Tapia Conference Scholar

Skills

Python, R, JavaScript, Java

Programming Languages

CSS, HTML, LaTeX, Markdown, RMarkdown

Markup Languages

Sci-kit Learn, NLTK, OpenCV, TensorFlow

Python Frameworks

React, Angular, Firebase

JavaScript Frameworks

CSV, JSON, XML

Data Interchange Formats

Git

Version Control