

Marina L. Zafiris

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Research Interests

Data Science with special interest in utilizing machine learning for computational sustainability and interdisciplinary information sciences.

Education

University of Houston Downtown (UHD)

Expected Graduation- December 2020

Pursuing a B.S. in Data Science

- Minors in Applied Mathematics and Statistics
- Domain Focus in Sustainability

Cumulative GPA : 3.86

Research

Undergraduate Complexity Research, Santa Fe Institute

June 2020 - August 2020

- Utilizing Semantic Segmentation of Satellite Images to Analyze Firescars in the Western Australian Desert

[Additional Information](#)

Nuclear Regulatory Commission Grant Research, UHD

September 2019 - Present

- Employing Machine Learning in the Study of Differential Equations Related to Nuclear Engineering

[Additional Information](#)

Systems Engineering in Sustainable Solutions, SUSTAIN UHD

January 2020 - May 2020

- Mushroom Incubator Development for UHD's Center for Urban Agriculture & Sustainability

[Additional Information](#)

Texas Workforce Commission Grant Research, UHD

April 2019 - September 2019

- Utilizing Statistical and Machine Learning Models to Best Predict Graduate Level Admittance.

[Additional Information](#)

Presentations

Women in Data Science Houston Conference, Virtual

October 2020

- Poster Presentation. "Semantic Segmentation of Satellite Images: Firescars in the Western Australian Desert."

SACNAS – The National Diversity in STEM Conference, Virtual

October 2020

- Poster Presentation. "Employing Machine Learning in the Study of Differential Equations Related to Nuclear Engineering."

ACM Richard Tapia Celebration of Diversity in Computing Conference,Virtual

September 2020

- Poster Presentation. "Employing Machine Learning in the Study of Differential Equations Related to Nuclear Engineering."

UHD Scholars Academy Student Research Conference, Houston TX April 2020

- Poster Presentation. "Employing Machine Learning in the Study of Differential Equations Related to Nuclear Engineering."

Ken Kennedy Institute Data Science Conference, Houston TX October 2019

- Poster Presentation. "Utilizing Statistical and Machine Learning Models to Best Predict Graduate Level Admittance."

Great Minds in STEM, Orlando FL September 2019

- Poster Display. "Utilizing Statistical and Machine Learning Models to Best Predict Graduate Level Admittance."

Honors and Awards

Certificates

- Rice Ken Kennedy Institute Certificate in Machine Learning August 2020
Fundamental of Machine Learning, Basic Methods, Deep Learning, and Advance Deep Learning and Reinforcement Learning

Scholarship

- ACM Richard Tapia Conference Scholarship, CMD-IT August 2020
- Nuclear Regulatory Commission Academic Grant, UHD Scholars Academy August 2019
- Academic Award Scholarship, UH August 2016

Academic

- UHD Dean's List Spring 2019
- UHD Dean's List Fall 2019
- UHD Dean's List Spring 2020

Competition

- 2nd Place Tapia Undergraduate Poster Award September 2020
ACM Student Research Competition
- Finalist Collegiate National Competition- Medical Innovation June 2017
Health Occupation Students of America
- First Place Collegiate State Competition- Medical Innovation April 2017
Health Occupation Students of America

Organizations and Affiliations

SUSTAIN Scholars Program, UHD January 2020 - August 2020

- Campus Program Member

Society for Advancement of Chicanos and Native Americans in Science September 2019 - Present

- National Member

American Indian Science and Engineering Society September 2019 - Present

- National Member

Scholars Academy, UHD August 2019 - Present

- Campus Program Member

Association for Computing Machinery, UHD
- Campus Chapter and National Member

August 2019 - Present

Health Occupation Students of America, UH

January 2017 - December 2017

- Chapter Event and Volunteer Coordinator
- National Member

Technical Experience

Languages: Python, RStudio, Julia, MATLAB, Unix shell scripts, HTML

Platforms & Systems: macOS, Microsoft Windows, Ubuntu Linux, Git/Github, Anaconda

Concepts: Data/Statistical Analysis and Visualization, Machine Learning

Work Experience

Center for Math and Statistics Peer Tutor, UHD

September 2019 - Present

- Provide assistance to students in college level Mathematics and Statistics

Volunteer Experience

Python Learner Track Mentor, A&M Datathon

October 2019

- Assist and mentor the competitors with their competition code

Scholars Academy Service Learning, Energy Day Houston

October 2019

- Interacting and assisting kids with building robots and teaching them about circuits