STEFANO FOCHESATTO

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Profile

I'm an enthusiastic problem-solver ready to launch my scientific career. My B.S. in Mathematics has fueled my passion for graph theory, applied mathematics, data science, and statistics. I'm seeking experiences that will expand my programming knowledge and work to address today's pressing problems in climate change and natural resource management.

Skills

Programming Languages: Matlab, Python, R, MySQL, LaTeX
Programming Tools: Jupyter Notebook, Git, VS Code, Google Cloud Platform, AWS, Microsoft Azure, OpenCV, Pytorch, Tensorflow
Languages: Spanish

Education

University of Alaska Fairbanks
Bachelor of Science, Major in Mathematics, Minor in Statistics

United States
August 2017 – Dec 2021

Relevant Coursework:
- Direct Study: Machine Learning in the Cloud
- Numerical Linear Algebra | Numerical Analysis
- Regression & ANOVA | Scientific Sampling

Awards:

Alaska Performance Scholarship   *2017 – 2021*
Semper Fidelis Award for Musical Excellence   *2016 – 2017*

Experience

Graduate Research Assistant
University of Alaska Museum of the North

January 2022 – Present
Fairbanks, Alaska

- Researched and developed a workflow for clustering herbarium sheet specimen in a way which signals species delimitation. Research was presented at Botany 2022.
- Applied multiple deep learning image clustering algorithms across both pytorch and tensorflow.
- Assisted in the development of a computer-vision and deep learning workshop for botanists at the Botany 2022 Conference.

Mathematics and Programming Intern
Cold Regions Research and Engineering Laboratory

May 2022 – August 2022
Fairbanks, Alaska

- Designed a deep learning algorithm to extract high quality snow cover data from time lapse videos.
- Aided multiple geo-science projects with statistical consultation on research design.
- Automated several workflows for collating and accessing data.

Direct Study
University of Alaska Institute of Arctic Biology

August 2021 – December 2021
Fairbanks, Alaska

- Assisted with the development of an undergraduate level Machine Learning course at UAF.
- Completed several Machine Learning projects, and model lab reports for future reference. Projects where primarily focused on Random Forest and Gradient Boosting models.
- Worked closely with Dr. Huettmann to create a ML model to produce a Relative Index of Occurrence (RIO) map for the Icelandic Rock Ptarmigan Species.

Mathematics Tutor   October 2020 – August 2021

University of Alaska Fairbanks Athletics Department   *Fairbanks, Alaska*

- Tutored several student athletes in various mathematical topics like the calculus sequence and statistics.
- Organized and lead large study sessions.
- Created individualized lesson plans tailored to the needs of each student.
- Achieved higher test grades in students and increased mastery of mathematical concepts.

Community Involvement

Fairbanks Jazz Workshop   **Fairbanks Community Jazz Band**   **First A.M.E. Church**

Co-Founder and Lead Musician   *First Chair Saxophonist*   *Lead Musician*

References

Prof. Jill Faudree   jrfaudree@alaska.edu

University of Alaska Dept. Mathematics   *(907)-474-7385*

Prof. Falk Huettmann   fhuettmann@alaska.edu

University of Alaska Institute of Arctic Biology   *(907)-474-7882*

Prof. Stefanie Ickert-Bond   smickertbond@alaska.edu

University of Alaska Museum of the North   *(907)-474-6277*