Mark T. Yamane

Seattle, WA

Cell: 206-795-2369 | **Email:** marktyamane@gmail.com | **Github**: github.com/mtyamane

---

EDUCATION

Bachelor's of Science (B.S.), Computer Science, Marine Science (Biology)   **2022**

Eckerd College, St Petersburg, FL, GPA: 3.85

- Dean's List: 2018, 2019, 2020, 2021, 2022
- Goldwater Scholarship recipient 2021
- NOAA Hollings Scholarship recipient 2020

TECHNICAL SKILLS

Languages

- *Python*
- *Java*
- *C++*
- *JavaScript*
- *Swift*
- *HTML, CSS*

Statistical Software

- *MATLAB, R, Excel, SPSS*

Image Analysis

- *ImageJ, Microsoft ICE*

Command Line Text Editors

- *Emacs, Vi/Vim, Nano*

Mapping

- *ArcGIS Pro, Ferret (NOAA)*

EXPERIENCE

Research Intern   **1/2021 – 5/2022**

Eckerd College, St. Petersburg, FL

- *Developed a **machine learning pipeline** to locate and identify tortoise individuals in camera trap images*
- *Built a Siamese deep **neural network** with triplet loss to recognize gopher tortoises using **TensorFlow, Keras**, and **SciKit-Learn** that achieved a 95% top-5 accuracy and 89% top-1 accuracy*
- ***Collaborated with biologists** to understand biological features to consider for the identification network*
- ***Wrote a paper** on this image processing pipeline which was presented at **national computer vision conference***

Research Intern – NOAA Hollings   **6/2021 – 8/2021**

Pacific Marine Environmental Laboratory, Seattle, WA

- *Developed and led a week-long **Python** scientific coding bootcamp for research interns before their internships*
- *Performed **exploratory data analysis** to understand ensemble forecast and point-observation data structures*
- *Wrote **Python** scripts using **Xarray** to interpolate Saildrone observations to model forecasts for **model validation***
- *Calculated signal-to-noise ratio, spread-skill, and time-series ensemble averages (**NumPy, SciPy**)*
- *Presented findings through a **poster presentation at a national conference** (AGU 2021 Fall Meeting)*

Research Intern – Oregon State University   **6/2019 – 8/2019**

Hatfield Marine Science Center (HMSC), Newport, OR

- *Fitted a Bayesian state-space integral projection model to survey data to estimate poaching in MPAs*
- *Developed and modified code in **MATLAB** and **R** for population modeling and data analysis*
- *Presented findings through an **oral presentation** at the 2019 HMSC Summer Intern Research Symposium*
- ***Published a paper** based on findings to a Biology Journal (Conservation Letters)*

COMMUNITY SERVICE

STEM Tutor   **11/2018 – 2/2020**

Academy Prep, St. Petersburg, FL

- *Taught 3D-modeling (CAD) techniques for Maker projects and subsequent printing (**Onshape**)*
- *Taught middle schoolers basic electronic circuit design*
- *Led activities at various STEM events in the St. Petersburg area to promote STEM in the community*