Lily Wittle

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SUMMARY

Senior majoring in Computer Science, Applied Mathematics, and Marine Science, transitioning from a focus on academic research to software development. Experienced in Python and Java.

TECHNICAL SKILLS

Programming Languages: Python, Java, C, SQL, Matlab Web Technologies: Python, JavaScript, HTML, CSS

Version Control: Git, Subversion

WORK EXPERIENCE

University of Miami Rosenstiel School of Marine and Atmospheric Sciences, Miami, FL Programmer Fall 2018 – Present

 Developing PySAR software using Python to analyze interferometric synthetic aperture radar data and produce time series data displayed on a website.

Reinventing Geospatial, Inc. (RGi), Fairfax, VA

Software Development Intern

Winter 2016-17

- Developed backend service using Python and SQL to fetch data from GDELT database.
- Designed and developed map-based user interface using HTML and CSS to fetch and visualize location-based data.

RGi, Fairfax, VA

Software Development Intern

Summer 2016

- Developed a map-based service using Python in a shared repository to allow U.S. Army soldiers to view, cache, and download geospatial data.
- Expanded feature set, including support for web map tile services, bounding boxes, and administrator logins, using Python for backend and JavaScript, HTML, and CSS for frontend.

RESEARCH EXPERIENCE

Geophysical Fluid Dynamics Laboratory, Princeton, NJ

National Oceanic and Atmospheric Administration Hollings Intern

Summer 2018

- Modeled ocean mixing with the MIT general circulation model (MITgcm) in a Linux environment.
- Improved efficiency of existing scripts and wrote new scripts for analysis using Matlab.

Fresno State Mathematics REU (Sponsored by the National Science Foundation), Fresno, CA Undergraduate Researcher Summer 2017

- Investigated the phase retrieval problem in Fourier analysis using Matlab.
- Presented findings in a talk at AMS/MAA Joint Mathematics Meetings in January 2018.
- Published paper in SIAM Undergraduate Research Online in May 2018. (https://doi.org/10.1137/17S016610)

ORGANIZATIONS AND HONORS

Univ. of Miami D1 Rowing Team – Co-captain and Varsity Coxswain; Women in Technology (WIT); Omicron Delta Kappa (National Leadership Honor Society); Univ. of Miami Software Engineering Club; Robert Kelley Award (Outstanding Math Major), National Merit Scholarship, Univ. of Miami Scholarships.

EDUCATION

University of Miami, Coral Gables, FL

Expected May 2019

Bachelor of Science in Marine and Atmospheric Science (B.S.M.A.S.) Candidate in Computer Science, Applied Mathematics, and Marine Science with **4.0/4.0 GPA**

- CS courses: Algorithm Analysis I & II, Software Engineering, Programming Languages, Database Systems, System Programming, Android Programming, and Computer Architecture.
- Graduate math courses: Real Analysis, Linear Algebra, Complex Analysis, Abstract Algebra, Partial Differential Equations.