R. Tucker Sylvia

37 Clarke's Village Road, Jamestown, RI 02835 | (401) 641-7698 | tucker@tuckersylvia.com

QUALIFICATION

Marine scientist with 4+ years research experience using integrated laboratory, numerical, and data-driven methods studying fluid dynamics of various natural systems. Developed and built custom software and hardware solutions to answer research questions. Exceptional verbal communication, writing, and interpersonal skills developed managing laboratories and teams, publishing collaborative research, and working in dynamic group settings.

CORE COMPETENCIES

- Computer programming (Python, MATLAB, BASH, Java)
- Image processing, computer vision, photogrammetry, and computational photography
- Scientific visualization, numerical simulation, and data science

EDUCATION

Master of Science - Oceanography, December 2017

Graduate School of Oceanography, University of Rhode Island, Narragansett, RI

- Concentration: Fluid Dynamics, Marine Geology and Geophysics
- Presented research at AGU Fall Meeting 2014 (poster), 2015 (**invited speaker**), 2016 (oral)

Bachelor of Science - Geology and Geological Oceanography, May 2014

University of Rhode Island, Kingston, RI

- Excelled at upper- and graduate-level courses
- Dean's List student

EXPERIENCE

Graduate Research Assistant and **Teaching Assistant,** *May 2014 – December 2017*

Viscous Fluid Dynamics Lab *and* Marine Geological Samples Lab

University of Rhode Island, Graduate School of Oceanography, Narragansett, RI

- Conduct research; Compile data; Prepare papers for publication and presentation to stakeholders and peers.
- Maintain clean and functional mixed-use lab spaces.
- Design observational experiments; Deploy oceanographic instrumentation (ADCP's, CTD's, TCM's, OBS's, drifters).
- Describe and catalog marine rock and sediment core samples; Maintain sample database; Fill external sample requests.
- Lecture to large diverse undergraduate audience; Convey scientific concepts in meaningful and intuitive ways to non-STEM students; Grade student work, provide timely and constructive feedback, track student progress.

Education Consultant and **Sailing Instructor,** Sail Newport, *May 2017 - Present*

Waterfront Director and **Adaptive Sailing Instructor,** Sail to Prevail, *June 2009 – August 2014*

Sailing Coach, Middletown High School*, Spring 2018*

- Safely provide participants basic knowledge and training to maneuver small sailing keelboats.
- Assess client ability and skill, develop individual learning objectives and plans of improvement.
- Plan and direct staff training and performance evaluations.
- Constantly observe the work environment, paying special attention to risk management.

CERTIFICATIONS AND ADDITIONAL SKILLS

- **First Aid and CPR**
- **OSHA HAZWOPER 40 hr.**
- **FEMA ICS 100, 200, and 700**
- **US Sailing Level 1 and Basic Keelboat Instructor**

- System administration and IT (**Linux**, Windows, Mac)
- Robotics and engineering (micro-controllers, digital motion control systems, machine tools, IOT)
- 3D printing and rapid prototyping
- Experiment and survey design; Ship-board and terrestrial field skills; Coastal and offshore instrument deployment and recovery
- Driving and backing up with trailers, launching boats using a crane, hoist, or ramp; Aerial rigging and hoisting
- Mechanical, electrical, and hydraulic systems design, maintenance, and repair