DYLAN SCHLICHTING

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EDUCATION

Ph.D. Oceanography, Texas A&M University — Jan 2020 - Dec 2024 (Expected)
Advisors: Drs. Robert Hetland & Henry Potter

B.S. Civil Engineering, University of Maine — Aug 2016 - Dec 2019
Minor: Mathematics

RESEARCH EXPERIENCE

Graduate Research Assistant — Jan 2020 - Present
Texas A&M University: Dept. Oceanography

Student Research Assistant — May 2017 - Dec 2019
UMaine: Dept. Civil Engineering

Engineering Research Assistant — Aug 2018 - May 2019
UMaine: School of Marine Sciences

Research Experience for Undergraduates — May 2018 - Aug 2018
Texas A&M University: Dept. Oceanography

RESEARCH INTERESTS

Coastal ocean modeling, submesoscale processes, estuarine physics, ocean mixing

PUBLICATIONS

3. **Schlichting, D.**, Qu, L., Hetland, R., and Kobashi, D. Using salinity variance budgets to quantify numerical mixing in a coastal ocean model. Manuscript submitted to *Journal of Advances in Modeling Earth Systems*.

2. Qu, L., Hetland, R., and **Schlichting, D.** Mixing pathways in simple box models. *Journal of Physical Oceanography*. https://doi.org/10.1175/JPO-D-22-0074.1.

1. Spicer, P., **Schlichting, D.**, Huguenard, K., Roche, A., and Rickard, L. (2021). Sensing Storm Surge: A framework for establishing a citizen scientist monitored water level network. *Ocean and Coastal Management*, 211, 105802. https://doi.org/10.1016/j.ocecoaman.2021.105802.

PRESENTATIONS

9. **Schlichting, D.**, Qu, L., Hetland, R., and Kobashi, D. (2022). Quantification of physical and numerical mixing using tracer variance dissipation in a coastal ocean model. Gordon Research Seminar/Conference on Ocean Mixing, June 4-10. Poster.

8. Hetland, R., Qu, L., and **Schlichting, D.** (2022). Tracer variance mixing in simple box models. Ocean Sciences Meeting. February 24 - March 4. Talk.

7. **Schlichting, D.**, Qu, L., Hetland, R., and Kobashi, D. (2022). Using salinity variance budgets to quantify numerical mixing in a coastal ocean model. Ocean Sciences Meeting. February 24 - March 4. Talk.

6. **Schlichting, D.**, Hetland, R., Qu, L., and Kobashi, D. (2021). Using tracer variance budgets to quantify numerical mixing offline in a coastal ocean model. Warnemünde Turbulence Days Meeting. December 6-9. Talk.

5. **Schlichting, D.**, Lieberthal, B., and Huguenard, K. (2019). An assessment into vegetation farms as a solution to coastal erosion in southern Maine. Northeast Aquaculture Conference, Boston MA. January 9-11. Poster.

4. **Schlichting, D.** and Hetland, R. (2018). Using salinity variance and total exchange flow to analyze salinity structure in an unsteady estuary. Physics of Estuaries and Coastal Seas Conference, Galveston TX. October 14-18. Poster.

3. **Schlichting, D.** and Hetland, R. (2018). Mechanisms controlling salinity structure structure in a broad, shallow, unsteady estuary. Sustainable Ecological Aquaculture Network Undergraduate Research Symposium, Walpole ME. August 7. Poster.

2. **Schlichting, D.** and Hetland, R. (2018). Salinity structure in Copano Bay. Texas A&M University Observing the Ocean REU Student Symposium, College Station, TX. August 2. Talk.

1. **Schlichting, D.**, Lieberthal, B., and Huguenard, K. (2017). Vegetation farms as a solution to coastal erosion for Saco, Maine. Sustainable Ecological Aquaculture Network Undergraduate Research Symposium, Walpole ME. August 16. Poster.

ADDITIONAL CONFERENCES ATTENDED

3. Scientific Computing with Python (2021). July 12-18. *Virtual*.

2. Scientific Computing with Python (2020). July 6-12. *Virtual*.

1. Coastal and Estuarine Research Federation conference (2017). Providence, RI, November 5-9.

TEACHING AND SERVICE

Judge: Environmental Geosciences (GEOS 405, TAMU)	Spring 2022
Tutor: Computers in Civil Engineering (CIE 115, UMaine)	Spring 2019

HONORS AND AWARDS

Louis and Elizabeth Scherck Scholarship	2020-Present
NSF S-STEM Scholar	Jan 2020 - Aug 2021
Oceanography Graduate Council mini-grant recipient (X3)	2021
Frank Sleeper - Sawyer Scholarship	2017 - 2019
Best capstone project	2019

Chi Epsilon Member: Civ. Eng. Honors Society	2019
NSF REU Scholar	May 2018 - Aug 2018
Alpha Tau Omega Memorial Scholarship	2018

SKILLS

- Proficient in Python and Matlab
- Proficient in LaTeX
- Basic experience with FORTRAN,
- Website design with GitHub Pages, HTML, and Ruby
- Basic experience with Linux administration
- Experience designing and analyzing Regional Ocean Modeling System (ROMS) simulations

PROFESSIONAL SOCIETIES

Association for the Sciences of Limnology and Oceanography

The Oceanography Society

American Society of Civil Engineers