John Ragland PhD

Post-Doctoral Scholar, School of Oceanography, University of Washington phone: (256)-678-2268, email: jhrag (at) uw (dot) edu, website: [John-Ragland.github.io]

Education

University of Washington Ph.D. in the department of Electrical and Computer Engineering, 2020-2024

Adviser: Shima Abadi

Thesis: Using coherent ambient sound to probe the ocean

Emphasis: Ambient noise interferometry, Ocean basin tomography

Auburn University M.S. in the department of Electrical and Computer Engineering, suma cum laude 2019-2020

Adviser: Thaddeus Roppel

Thesis: Digital Simulation and Recreation of a Vacuum Tube Guitar Amp[link] Emphasis: Digital Signal Processing, Real-time Audio Processing, Physical Modeling

Auburn University B.S. in the department of Electrical and Computer Engineering, suma cum laude, 2015-2019 *Honors College Scholar*

Experience

- Post-Doctoral Scholar, July 2024 (present), University of Washington
- Graduate Researcher, June 2020 June 2024, The University of Washington
- Summer Intern, June 2022 September 2022, Applied Research in Acoustics
- Graduate Teaching Assistant, May 2019 May 2020, Auburn University

Journal Publications

(in preparation) **Ragland, John** and Durofchalk, Nicholas and Dall'Osto, David and Gemba, Kay and Abadi, Shima, (2024), Positive receptions of the Kauai Beacon with Ocean Observatories Initiatve Hydrophones, *The Journal of the Acoustical Society of American Express Letters*

Ragland, John and Abadi, Shima and Sabra, Karim, (2024), Using Ocean Ambient Sound to Measure Local Integrated Deep Ocean Temperature, *Geophysical Research Letters Vol. 51* [link]

(submitted) Schönau, Martha and Hiron, Luna and Ragland, John and Raja, Keshav and Skitka, Joseph and Solano, Miguel and Xu, Xiaobiao and Arbic, Brian and Buijsman, Maarten and Chassignet, Eric and Coelho, Emanuel and Helber, Robert and Shriver, Jay and Summers, Jason and Verlinden, Kathryn and Wallcraft, Allan, (2024), An overview to modeling, characterizing, and predicting the effects of internal gravity waves on acoustic propagation at basin to global scales, *Oceanography Magazine*

Ragland, John and Schwock, Felix and Munson, Matthew and Abadi, Shima, (2022), An overview of ambient sound using Ocean Observatories Initiative hydrophones, *The Journal of the Acoustical Society of America Vol. 151* [link]

Ragland, John and Abadi, Shima and Sabra, Karim, (2022), Long-term noise interferometry analysis in the northeast Pacific Ocean, *The Journal of the Acoustical Society of America Vol. 151* [link]

Ragland, John and Abadi, Shima, (2022), Exploring surface source contributions to ocean ambient noise interferometry with airgun shots, *The Journal of the Acoustical Society of America Vol. 152* [link]

Invited Talks

MG&G Group, University of Washington, Seattle WA - February, 2024 MG&G Group, University of Washington, Seattle WA - May, 2023 Navy Research Laboratory, Ocean Sciences Division, Stennis MS - March, 2023 Applied Research Laboratory - UW, Seattle WA - November, 2022

Awards

- ASA best student paper award- second place at the ASA Nashville in underwater acoustics technical committee, December 2022
- The Daoma and Murray Strasberg Memorial Scholarship for Graduate Students in Ocean Acoustics, May 2023

Cruise Experience

R/V Rachel Carson, 2022, 2 days - deployed mooring with two hydrophones that was successfully recovered
one week later. The goal of this deployment was to acoustically measure methane seeps in the Puget Sound.