

EDUCATION

University of Washington: Candidate for Masters, PhD in Oceanography, **3.7 GPA** Spring '28
Northeastern University: Bachelors in Electrical Engineering, minor in Marine Biology Dec '23
Dean's List, Three Seas Scholarship, Honors Program, senior editor/writer for [NUSci Magazine](#), **3.9 GPA**
AAUS Scientific Scuba Diving and PADI Open Water Certifications: Active since Summer 2022

SCHOLARSHIPS AND AWARDS

- Bruce Pelzer Presidential Scholarship (Northeastern)
- 1st Place in 2023 ECE Capstone Projects
- Provost Excellence Fellow (PEF) (UW)
- National Merit Scholarship

SKILLS

- Programming (Linux/Unix, ROS, Python, C++, MATLAB, RaspPi)
- Schematic/PCB Layout (KiCad, Altium)
- Modeling and Simulation (AutoCAD, SolidWorks, PSpice/OrCad)
- Hardware (soldering, oscilloscope, troubleshooting, reworking)
- French
- In-field wildlife observation, animal handling, sample processing, biometric/allometry/blood collection

PROJECTS & CRUISE PARTICIPATION

- ECE Capstone Project - "Sound Floats: A low-cost acoustic release"** July '23 - Dec '23
– Led a group of 5 engineers to design and build a functioning acoustic release for oceanographic use
- Pixel Tracking Machine Learning Program** Principality of Monaco, Jan '23
– Modify / expand existing pixel tracking software, follow penguin-of-interest to nest in colony of ~250
- NOAA R/V Auk and R/V RHIM, Stellwagen National Marine Sanctuary** March '22
– Operate DMS measurement equipment, advise cruise path based off data, wildlife lookout
- NU GENERATE Club, Hardware Build Studio Engineer** Sept '20 - Nov '21
– Electronic design, power electronics, and software integration work for various semester-long projects

RESEARCH

- Three Seas Research Semester** Friday Harbor, WA; Bocas del Toro, Panama, Aug '22 - Dec '22
– Marine biology field- and research-intensive courses focused in PNW and Caribbean ecosystems
- Center for Conservation & Research of Endangered Wildlife (CREW)** Aug '16 - Jan '20
– Enzyme Immunoassays (EIA), sample preparation (lyophilizer), hormone extractions, manuscript prep

PROFESSIONAL EXPERIENCE

- GreenSight Agronomics** Jan '23 - June '23
– PCB design and board assembly/troubleshooting for commercial drones and payloads, mainly KiCad
– Developed Environmental Applications team, pair tech with ecology/environmental research needs

Woods Hole Oceanographic Institution, Engineering Assistant II/III**July '21 - June '22**

- Built/installed infrared camera system to monitor whale blows off ships, troubleshoot motor control
- System of remote transmitters/receivers to transmit location of certain tagged penguin in large colony

Institut Polaire Français, Engineer/Ornithologist Dumont d'Urville, Antarctica, Dec '21 - Mar '22

- Constructed/installed series of cameras for Adélie penguin colony observation, biological procedures
- Up-keep/troubleshooting for weighing system, solar dispersion antenna systems, existing cameras

Doble Engineering, Hardware Co-op**Marlborough, MA, Jan '21 - June '21**

- Electrical hardware builds, soldering, reworks (≥ 0603) troubleshooting PCBs, EMI test engineering

PUBLICATIONS

- Wojtusik, J., Brandicourt, I., Rice, W., & Roth, T. (2020). Reproductive cycle & pregnancy monitoring in common hippopotamus through salivary steroid analyses & trans-abdominal ultrasonography . Journal of Zoo and Aquarium Research, 8(3), 181–187. <https://doi.org/10.19227/jzar.v8i3.494>
- Bodet, D., Hall J., Sen, P., Johnson, R., Brandicourt, I., Cantos Roman, X, Shoura, O, Miquel Jornet, J. (2022). Data signals for Terahertz communications research. Computer Networks, Volume 203, 2022, 108628, ISSN 1389-1286, <https://doi.org/10.1016/j.comnet.2021.108628>.