Emily Whitaker

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EMPLOYMENT

OCR Specialist LinkSquares, Boston, MA September 202- Present

- Managed the lifecycle of documents through the POC, from receipt to internal and external OCR, to QA delivery
- Created smoother workflows across multiple teams decreasing ticket time
- Designed a data dashboard to track KPIs and identify trends, and monitor internal clients

Teaching Assistant (of record), University of Wisconsin-Madison Fall 2018, 2019, 2020

- Biology 152: "Introduction to Biology" taught and assisted with transition to online learning
- Zoology 316: "Limnology" Fall 2018, head TA Fall 2019
- Made weekly teaching plans, graded independent research projects, and led weekend research trips

Northeast Climate Adaptation Science Center Fellow University of Wisconsin-Madison 2018- 2020

- Developed new techniques in winter limnology
- Built a legacy program of winter research at UW-Madison

Lab Manager and Researcher, Contextual Dynamics Lab, Dartmouth College July 2017- June 2018

- Directed research in an adaptive memory experiment
- Coordinated with Dartmouth-Hitchcock Medical hospital for data and project management
- Wrote and revised grants, lab papers, and IRB protocols, updated lab code (Python2 to Python3)
- Worked in Docker, Pandas, NumPy, SciPy, TensorFlow, AWS to manage lab databases
- Trained, coordinated, and mentored 14 undergraduate research assistants

Mentor, Dickinson College, Carlisle, PA, April 2015- May 2017

- Developed the New Student Programs at Dickinson College
- Assisted first year mentors with issues that arose in their groups, advised on group activities, ran meetings, maintained a budget
- Assisted a group of 18 First Years with their transition to college life

Research Fellow, Dickinson College, Carlisle, PA, Spring- Fall 2016

Interfacing a Solar Air Heater with a Methane Producing Biogas Digester

- Designed and implemented a solar air heater to sustain a biogas digester during winter months
- Collaborated with Bucknell University to measure biogas quality and system efficiency

National Science Foundation REU LTER Fellow Summer 2015

University of Wisconsin-Madison**,** Madison, WI, Advisors: Dr. Ankur Desai and Dr. David Reed

- Synthesized data from multiple lakes in multiple seasons and years to create a dynamic model of how heat moves through a lake and how lakes freeze and thaw
- Determined that CS616 soil water content sensors could measure ice thickness

Lifeguard, Dickinson Carlisle, PA, Fall 2013-Spring 2014

Overnight Camp Counselor, Camp Speers-Eljabar YMCA, Dingmans Ferry, PA Summers 2011-2014

SKILLS

- **Computer**: R, Python, Tableau, GitHub, Docker, Vernier software, Campbell sensors, HOBOware, LabVIEW, Jupyter, MATLAB, ggplot2, Microsoft Suite, PID, Arduino, HTML, Java
- **Other**: Research and development, sensor development, soldering, qualitative research, statistics, data visualization

PEER-REVIEWED PAPERS

Sharma, S., Meyer, M.F., Culpepper, J., Yang, X., Hampton, S., […], **Whitaker, E.C**, et al. (2020), *Integrating perspectives to understand lake ice dynamics in a changing world*. Journal of Geophysical Research-Biogeosciences. doi: 10.1029/2020JG005799

Reed, D.E, Desai, A.R., **Whitaker, E.C.**, and Nuckles, H. (2019), *Evaluation of low-cost, automated lake ice thickness measurements*. Atmospheric and Oceanic Technology. doi: 10.1175/JTECH-D-18-0214.1

Whitaker, E. C., Reed, D. E., and Desai, A. R. (2016), *Lake ice measurements from soil water content reflectometer sensors*. Limnol. Oceanogr. Methods, 14: 224–230. doi: 10.1002/lom3.10083

EDUCATION

University of Wisconsin-Madison, Madison, WI December 2020
Master of Science: Freshwater and Marine Sciences
Advisor: Dr. Hilary Dugan

Awards and Honors:

- Full Scholarship ($250,000 not including materials and stipend) August 2018-December 2020
- Awarded an additional $5,000 through grants and awards August 2018-December 2020
- Malueg Award: recognizes excellent and unusual achievement by a graduate student

Independent Project Mentees:

-Sydney Widell, Sam Ahler, and Alaina Eckert

Dickinson College, Carlisle, PA May 2017
Bachelor of Science: Physics, Certificate: Social Innovation and Entrepreneurship
Thesis: Where do contaminates accumulate on gravity-capillary waves? Advisor: Dr. Stephen Strickland
Thesis: Exploring the Feasibility of a Colocation Project in Carlisle, PA Advisor: Dr. Helen Takacs

Honors

-Rush Citizen of the Year: Recognized for citizenship, leadership, enacting positive changes, peer accountability, and self-governance
-1902 Award: given to the Junior student who has done the most for the good of the college
-Poster Honors
-Awarded over $11,000 in applied grants for research and travel for presentations