ELKE WINDSCHITL

(319) 631-8691 | elke@bren.ucsb.edu | elkewind.github.io | GitHub | LinkedIn | Goleta, CA

SUMMARY OF QUALIFICATIONS

- Master's degree (expected June 2023) in environmental data science; bachelor's degree in biology with honors and a self-directed marine ecology focus
- Multifaceted professional and volunteer experience with environmental non-profit organizations, government-owned organizations, and public-facing retail experience at a large corporation
- Collaboration on data-driven research projects in small intellectually diverse teams
- R and Python programming experience; digital literacy skills in GitHub, Git, Excel, PowerPoint, and ArcGIS

EDUCATION

Master of Environmental Data Science, 3.92 GPA (Expected June 2023)
Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)
  Awards: Master of Environmental Data Science Academic Fellowship (2022)
  Leadership: Dean's Advisory Council Representative, Master's Curriculum Committee Representative
  Highlighted Coursework: Geospatial Analysis & Remote Sensing, Machine Learning, Statistics, Data Visualization and Communication, Modeling Environmental Systems (all to be completed by June 2023)
  Workshops: Teach Me How to Google, Data Science Blogs, Graphic Design for Scientists, Intro to Shiny

Bachelor of Science in Biology, 4.00 GPA (May 2020)
Iowa State University (ISU)
  Honors: Summa Cum Laude, Dean's List (4 quarters), Honors
  Involvement: Cultural Ambassador (Fall 2020), National Student Exchange Program (University of Hawaii at Hilo, Fall 2018; California State University Monterey Bay, Spring 2020)
  Highlighted Coursework: Marine Science Service Learning, Cetacean Behavior, Hawaiian Coral Reefs
  Employment: Women in Science and Engineering Student Role Model (Spring 2018, Spring 2019, Fall 2020), Undergraduate Research Assistant – ISU, Janke Lab (Spring 2019, Fall 2019)

PROFESSIONAL EXPERIENCE

Animal Behavior Research Fellow (7/21–9/21)
Virginia Aquarium and Marine Science Center (VAQ), Virginia Beach, VA
- Integrated the use of a digital animal behavior monitoring tool, Zoo Monitor, at the VAQ by developing workflows and creating teaching materials to train new and existing staff to use Zoo Monitor.
- Collaborated with animal care staff to develop research questions to better understand how target animals' behavior changed based on time of day, location, and guest count.
- Collected and analyzed American crow and harbor seal behavior data using Zoo Monitor software and R.
- Presented research results to 50+ aquarium staff via a 45-minute Zoom PowerPoint presentation to inform science-based animal care procedure changes at the aquarium.

Animal Behavior Research Intern (6/19–8/19)
Saint Louis Zoo, Saint Louis, MO
- Collected bear and primate behavior data by conducting live observations apart an 8-person team to inform future animal care decisions at the zoo.
- Collected viper behavior data by conducting independent video observations using Observer XT to contribute to a study investigating whether viper tongue flicks are in indicator of stress.
- Collected mother-infant antelope behavior data by conducting independent video observations using Observer XT to contribute to a 30+ year study to help inform future care of mother-infant pairs.

DATA-DRIVEN PROJECTS

Developing a Geospatial Model for Kelp Forest Management and Restoration (1/23–Present)
Role: Project Manager | **Client:** Ocean Rainforest & Natalie Dornan UCSB | **Master's Capstone Project**
- Developing an interactive map in a Shiny application with R to display how various oceanographic factors interact with kelp forest health and abundance to aid in Ocean Rainforest's citing of aquaculture plots.
- Aligning spatiotemporal resolution of multiple data sets to create one synthesized dataset containing oceanographic factors and metrics of kelp health and distribution as a deliverable for clients.
- Managing project deadlines, deliverables, and meetings with Gantt Charts, Zoom, and GitHub.

Evaluating the Use of Autonomous Recording Units (ARUs) for Monitoring Bobwhite Coveys (1/19–12/19)
Client: Dr. Adam Janke & Iowa Department of Natural Resources (DNR) | **Bachelor's Capstone Project**
- Developed 3 research questions and methods of investigation for assessing the use of ARUs (a new technology) to study Northern bobwhite quail and support the National Bobwhite Conservation Initiative.
- Processed, analyzed, and visualized extensive quail audio data using R, Raven Pro, Excel, and PowerPoint.
- Presented a research poster at the National Conference for Undergraduate Research detailing how ARUs can be used by the DNR to monitor occupancy of quail in place of labor-intensive point count surveys.

ADDITIONAL EXPERIENCE & VOLUNTEER WORK

Cashier & Customer Service (1/22–7/22)
Whole Foods, Seattle, WA
Provided excellent customer service while cashiering, bagging, and monitoring self-checkout machines; trained 8 new team members on standard operating procedures in the customer service department.

Creative Collaborator (6/18–5/22)
The LENA Project, Iowa City, IA
Collaborated in the start-up of a non-profit organization focused on environmental education by brainstorming project ideas, providing digital content, and engaging with community members; created website pages using Squarespace to communicate the organization's mission and projects; designed marketing materials and environmental education infographics using Canva, Adobe Photoshop, and Procreate for various projects including the Strawless Initiative, and Prompt for the Planet: Chapter 2.

Project Founder and Coordinator (10/20–12/20)
Iowa City Holiday Toy Redistribution Project, Iowa City, IA
Founded a sustainable and COVID-safe toy redistribution project to redistribute approximately 1000 high-quality used toys in the community with support from The LENA Project; executed and coordinated the project by collecting high-quality used toy donations, creating a website for listing the toys, organizing toy inventory and orders, and coordinating volunteers to distribute claimed toys.

SKILLS, CERTIFICATIONS, & AFFILIATIONS

Programming Languages: R, Python
Environments: RStudio, Jupyter Notebook, VS Code
Certifications: Fundamentals of GIS, University of California, Davis (2/21), GIS Data Formats, Design, and Quality, University of California, Davis (3/21), PADI Open Water Diver, University of Hawai'i at Hilo (9/18)
Other Digital Literacy: GitHub, Git, ArcGIS, Shiny, Word, Excel, PowerPoint, Zoom, Facebook, Instagram, Twitter, Slack, Canva, Squarespace, Wix, Adobe Photoshop, Procreate
Affiliations: California Association of Environmental Professionals (10/22–Present)