

Christina Appleby

cmbappleby@gmail.com

843-813-8057

<https://cmbappleby.com>

<https://github.com/cmbappleby>

EXPERIENCE

Scientist in Parks Ecology Assistant Intern

Jun. 2025–Sep. 2025

Rocky Mountain Inventory & Monitoring Network | Fort Collins, CO (Remote)

- Assisted wetlands and ungulate ecological monitoring field crews with data collection to understand protocol workflows and database needs
- Modified existing Survey123 Connect forms to meet the data collection needs of field crews
- Created Microsoft Access queries to QAQC wetlands and ungulate ecological monitoring, ensuring data quality and integrity for data analysis and publication
- Developed R scripts to automate camera trap image processing, file organization, and QAQC checks

Research Assistant

Mar. 2025–Oct. 2025

Boise State University | Boise, ID (Remote)

- Evaluates the effectiveness of automated black-tailed jackrabbit detection in thermal drone footage by extracting and annotating frames from drone footage, training a YOLOv5 machine learning model, and evaluating model accuracy
- Coordinating the manuscript writing process, ensuring scientific rigor, clarity, and alignment with journal submission guidelines

Scientist in Parks Data Scientist Intern

Feb. 2024–Feb. 2025

North Coast and Cascades Inventory & Monitoring Network | Port Angeles, WA (Remote)

- Employed ArcGIS Pro geoprocessing tools to extract relevant data from feature classes and raster datasets, optimizing datasets for machine learning model input
- Leveraged strong collaboration and communication skills to work effectively with stakeholders to build ArcGIS Pro geoprocessing tools using Python to automate GIS workflows
- Developed user-friendly R scripts and packages to simplify the data publication process, including metadata creation Ecological Metadata Language format
- Collaborated with stakeholders to design and build data models, deploy databases, and develop ETL (extract, transform, and load) processes to ensure data quality and integrity
- Performed QAQC checks of data entered into databases, verifying suspect entries with scanned datasheets and correcting, if necessary
- Converted park atlases from ArcGIS Web AppBuilder to Experience Builder to ensure atlas availability after Web AppBuilder retirement

Reactor Operator and Senior Reactor Operator Instructor

Sep. 2020–Jan. 2024

Idaho National Laboratory | Idaho Falls, ID (Hybrid)

- Utilized instructional design skills to create and revitalize in-person presentations and web-based training courses, incorporating interactive elements to engage learners
- Trained operators on complex reactor plant systems, including classroom and hands-on training, resulting in increased operational efficiency and safety

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EXPERIENCE

Coastal Fellow

May 2017–May 2018

University of Rhode Island | Kingston, RI

- Evaluated the potential of UAS for mapping the dynamic morphology of a sandy spit subject to frequent storm-induced changes
- Processed UAS imagery using PIX4Dmapper and ground control point coordinates to generate georeferenced orthomosaics with a spatial resolution of 3.14 centimeters

Electronics Technician Nuclear (E-7)

Aug. 2001–Aug. 2012

United States Navy

- Tracked and monitored staffing of over 400 department personnel and scheduled attendance to advanced schools to maintain production, flexibility, and proficiency during inevitable crew turnovers
- Provided one-on-one training for nuclear power plant operations and prepared students for hands-on operations with procedure reviews, demonstrations, and knowledge checks (5 years)
- Performed, scheduled, and supervised reactor instrumentation and controls maintenance following strict procedures and recording data

EDUCATION

M.S. in Geographic Information Science

2024

Idaho State University | Pocatello, ID (Distance Learning)

GPA 3.96/4.0

Relevant Coursework:

- Advanced Analysis Methods of UAS Data: Processed LiDAR data for mapping landslides, detecting individual trees, identifying Golden Eagle nesting locations, and created canopy height models
- Geostatistical Spatial Data Analysis: Analyzed UAS imagery to identify prairie dog burrow locations using machine learning, as well as exploratory analysis, pattern detection, regression modeling, random forest predictive modeling
- Advanced Remote Sensing: Analyzed various remotely sensed data using ENVI, ESA SNAP, and ArcGIS Pro, including multispectral imagery, radar, and thermal data
- GPS/GNSS Applications in Research: Collected coordinates using GNSS devices and ESRI Field Maps, conducted sagebrush surveys

B.S. in Environmental and Natural Resource Economics

2018

University of Rhode Island | Kingston, RI

GPA 3.97/4.0