# Flora Shu-Qi Hamilton 洪書琪

flora.s.hamilton(at)gmail.com • website • portfolio • GitHub • LinkedIn

## **EDUCATION**

Master of Environmental Data Science '24, Bren School of Environmental Science & Management, UCSB Bachelor of Arts in Mathematics and Environmental Studies '21, Bowdoin College, Brunswick, ME

#### PROFESSIONAL EXPERIENCE

**Natural Resource Ecology Laboratory,** Fort Collins, CO (remote) **Research Associate** (9/16 – Present)

- Analyze, process, and visualize virtual fencing project result data and assess ecological impact on rangelands using R, ArcGIS, and Google Earth Engine.
- Prepare research for publication and communicate findings to partners including Colorado Parks and Wildlife, Colorado ranchers, and The Nature Conservancy.

#### **NASA DEVELOP**

**Project Lead** (Goddard Space Flight Center, 9/24-11/24)

• Led a 4-person team utilizing NASA remote sensing data to map oak tree mortality risk in Illinois for the Morton Arboretum. Produced maps, models, and tools using ArcGIS, R, Python, and the Climate Engine API. Coordinated with stakeholders to align project outcomes with current oak management strategies.

Geospatial Analyst (Colorado State University, 6/24-8/24) | Technical Paper

- Utilized Earth observation data to assess snowpack-wildfire relationships for water utility management in Colorado. Evaluated Lidar snow depth data, developed Random Forest models to identify drivers of snowdepth changes, and contributed analysis to technical paper. Research presented by team at GeoWeek '25.
- Follow-on manuscript in collaboration with Airborne Snow Observatories and NREL in progress.

# Darn Tough, VT | Master's Capstone Project | Carbon Data Analyst (01/24-06/24) | Repository • Blog • About

 Updated Darn Tough's carbon accounting model for quantifying sock production supply chain emissions in accordance with GHG Protocol guidance. Developed an interactive application for visualizing annual CO2e's.

## Cary Institute of Ecosystem Studies, Millbrook, NY | Data Jam Data Intern (12/22–7/23)

- Worked with scientists to create datasets, worksheets & metadata for Hudson Data Jam Competition.
- Assisted in classroom instruction, communicating data science and environmental science principles.

# SOSV and Orbit Startups, Taipei, Taiwan

**Investment Specialist** (6/21–2/22)

- Sourced, researched, and met with potential start-ups in SEA region, conducting interviews with general partner for investment. Researched and wrote memos for add-on investments of global VC with 1.3+ AUM.
- Advised, supported, and reviewed investment, financial, and sales materials for portfolio companies.

## Integrative Economics, LLC, Portland, OR

**Independent Contractor** (7/22–10/22) & **Product Development Intern** (3/20–8/20)

- Identified high-impact areas for planting pollinator-friendly species in the Willamette Valley using cluster analysis in QGIS; analyzed COVID's economic impact on the domestic blueberry industry for the High-Bush Blueberry Council.
- Developed cooperative pesticide reduction strategies for growers using remotely sensed vegetation data.

# **RELEVANT SKILLS**

**Technical:** R, Python, Git & GitHub, Google Earth Engine, ArcGIS, Markdown, SQL, HTML, CSS, database management, data analysis, geospatial analysis, statistical analysis, machine learning, dashboard development, Google & Microsoft Suite | **Languages:** English, Mandarin Chinese