BRIDGET HASS

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Skilled in developing open, reproducible workflows for remote sensing data processing and analysis. Experience creating and teaching open-source live coding tutorials for working with aerial lidar and hyperspectral data to support ecological research applications.

RELEVANT EXPERIENCE

2016-PRESENT

Remote Sensing Data Scientist, National Ecological Observatory Network (NEON) Airborne Observation Platform (AOP), Battelle Memorial Institute

- Develop automated, version-controlled workflows for lidar processing and generating open access remote sensing (aerial lidar, hyperspectral, camera) data products
- Create and teach live-coding tutorials in Python Jupyter Notebooks on reproducible remote sensing data processing and analysis (using open NEON data)
- Create and maintain remote sensing data pipelines, implement version control
- Lead field campaigns for lidar validation and hyperspectral radiometric calibration

2012-2015

Graduate Research and Teaching Assistant, Oregon State University

- Thesis on subduction zone heat flow modeling for the International Ocean Drilling Program (IODP) Costa Rica Seismogenesis Project (CRISP). Published findings in G^3 (Geochemistry, Geophysics, Geosystems)
- Consulted on international marine oil exploration cruises; collected, processed, and analyzed marine heat flow data for use in models to locate offshore petroleum reservoirs
- Taught undergraduate laboratory courses in geology, geophysics, and atmospheric science

2011-2012

Marine Geophysical Technician, Scripps Institution of Oceanography, University of California, San Diego

- Assembled, maintained, repaired, and assisted with shipboard operations of marine geophysical instruments including multichannel seismic reflection, magnetometers, and echosounders on scientific research cruises

EDUCATION

JUNE 2015

M.S., Oregon State University

- Degree: Earth, Ocean, and Atmospheric Science, Concentration: Marine Geophysics
- Research projects in seismology and heat flow

MAY 2010

B.S., Cornell University

- Degree in Science of Earth Systems, College of Engineering
- Honors thesis on seismic receiver functions to map geothermal profile of New Mexico

OPEN-SOURCE TRAINING

OCT 2020
Google Earth Engine for Ecology and Conservation – Organization for Tropical Studies
Two-week online course on using GEE for ecological applications.

FEB-JUNE 2020
Data Science Nanodegree – Udacity
4 month, 160 hour training in Data Science principals using Python to generate data pipelines, software engineering principles, machine learning, and recommendation systems

FEB 2020
Foundations for Open Science Skills – CyVerse, University of Arizona
Week long workshop on FAIR data principals, open science skills, reproducible research, and version control in GitHub

JAN 2017
Reproducible Science Curriculum Hackathon – Berkeley Institute for Data Science
Three day Hackathon to generate a prototype of a Data Carpentry workshop on reproducible science principals using Python Jupyter Notebooks

TEACHING & WORKSHOP EXPERIENCE

2020 & 2021
CyVerse-NEON AOP Workshops and Webinars
Developer and Instructor: *CyVerse-NEON Airborne Observation Platform Workshop*
Open source tools in R, Python (Nov 2020), and Google Earth Engine (Nov 2021) for working with NEON AOP data in the CyVerse computing environment.
Guest Instructor: Bright Lights, Big Data: Leverage NEON's Datasets and Resources
https://cyverse.org/webinar-NEON

2017 & 2018
NEON Remote Sensing Data Institutes
Developed and taught live-coding materials for week-long intensive workshop on creating reproducible workflows using NEON remote sensing data in Python Jupyter Notebooks.
https://www.neonscience.org/resources/learning-hub/workshops/neon-data-institute-2018-remote-sensing-reproducible-workflows

LINKS

LinkedIn: www.linkedin.com/in/bridget-hass

GitHub: https://github.com/bridgethass
https://github.com/NEONScience/NEON-Data-Skills (contributor)