Sofia Ingersoll

/soF-AYA Ing-er-saul/

Sofia.Ingersoll@Outlook.com | Website |Portfolio | GitHub |LinkedIn

EDUCATION

Master of Environmental Data Science| *June 2024* |Bren School of Environmental Science & Management, UCSB
<u>Leadership</u>: Class Co-Chair; Dean's Advisory Committee, Representative; BSLC, Representative

Bachelor of Science in Chemistry | *June 2023* | Earl Warren College, University of California, San Diego
<u>Certification</u>: American Chemical Society (ACS) Certification

A.S. in Mathematics, Physics, Chemistry, & Natural Sciences | *June 2021* | Moorpark College, Moorpark, CA
<u>Leadership</u>: Women in Engineering, Mathematics, & Science, Treasurer (2020–2021)

PROFESSIONAL EXPERIENCE

Project Lead, Geospatial Analyst, Machine Learning Data Engineer (Expected: 1/25–9/25)
NASA DEVELOP Analytical Mechanics Associates @ Jet Propulsion Laboratory
<u>Projects</u>: *San Bernardino Wildland Fires Project; Los Angeles County Ecological Conservation Project*

● Analyze, quantify, synthesize, and communicate findings for Earth observation satellite and radar data. Produce high quality science communication materials such as technical papers, posters, presentations, metadata, statistical, and map visualizations.

● Establish project organization highlighting milestones, define QA practices, act as the primary point of contact when conducting stakeholder interviews, and maintain partner relations. Present findings in-person at live-streamed events, as well as answer questions.

Environmental Data Scientist (10/23–10/24)
The 2035 Initiative, UCSB
<u>Affiliations</u>: *California Climate Action (CCA); The Energy Governance and Political Economy (EGAPE) UC Santa Barbara; Institute of Energy Efficiency (IEE), UCSB; Political Science Department, UCSB*

● Supported a myriad of projects with interdisciplinary teams, compiled and analyzed datasets, developed remote-sensing surveying methods, conducted literature reviews, created interactive maps, and other informative data visualizations, provided statistical interpretations, trouble-shot, and optimized workflows.

Master's Capstone Lead Data Engineer & Communications Manager (1/24–6/24)
Understanding the Influence of Parameter Value Uncertainty on Climate Model Output
<u>Affiliation</u>: *National Center for Atmospheric Research - Climate & Global Dynamics Lab (NCAR CGD); Bren School of Environmental Science & Management; National Center for Ecology Analysis and Synthesis (NCEAS).*
Blog | Presentation | Data Repository | Technical Documentation

● Designed data modeling workflows to meaningfully visualize climate modeling predictions from a 10TB database of NetCDF files using high-performance computing (HPC). Applied dimensional reductions; spatial, and temporal manipulations; Bayesian machine learning analysis; sensitivity, accuracy, and validation testing.

Environmental Data Analyst (12/22–6/23)
<u>Affiliation</u>: *P.I. Dr. Jonathan Slade; UC San Diego Dept of Atmospheric & Analytical Chemistry, Chemistry & Biochemistry; Scripps Institution of Oceanography, UC San Diego; Environmental Protection Agency (EPA)*

● Collected aerosol spray and seawater samples for analysis, produced weekly reports using local meteorological and hydrological data to evaluate local climate effects impacts on public health, analyzed marine sample contaminants related to plastic, stormwater, and wastewater. Standardized various data sources and created various preliminary data visualizations.

RELEVANT SKILLS

Languages & Software: R, Python – proficient, SQL, Git/Bash – confident, HTML, CSS, SCSS, JS – familiar, GitHub, Version Control, Microsoft Suite, Survey123, Docker, ESRI, ArcGIS Pro, ArcPy, & QGIS, Google Earth Engine

Analytical & Technical: Geospatial analysis, qualitative & quantitative data analysis, sample collection and analysis, database management, map visualizations, error analysis, technical writing, field monitoring, uncertainty quantification, statistical analysis, dashboard/web app development, CEQA/NEPA assessments