Sofia Ingersoll
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EDUCATION

Master of Environmental Data Science| *June 2024* |Bren School of Environmental Science & Management, UCSB
    Leadership: 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
    Certification: American Chemical Society (ACS) Certification

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

PROFESSIONAL EXPERIENCE

NASA DEVELOP Analytical Mechanics Associates @ Jet Propulsion Laboratory, Pasadena, CA [*Python, Arc Pro*]
Project Lead & GIS Specialist for the San Bernardino Wildland Fires Project (Expected: 1/25–4/25)
- Assess pre- and post-fire landscape characteristics of the Line Fire (2024) and the Angelus Oak Understory Rx Burn (2024) to understand and compare vegetation recovery rates and post-fire sediment changes related to run-off in downstream watersheds.
- Analyze, synthesize, and communicate findings for NASA's EO satellite and radar data, produce science communication materials: technical paper, code repositories, poster, presentation, a comic strip, and publication.
- Establish project organization highlighting milestones, define QA practices, act as the primary point of contact.

NCAR Climate & Global Dynamics Lab, Santa Barbara, CA   [*Python, Docker*]
Master's Capstone Lead Data Engineer & Communications Manager (1/24–6/24)
Blog | Presentation | GitHub Organization | Data Repo
- Designed data wrangling methods for dimensional reductions; spatial, and temporal manipulations; machine learning analysis; accuracy, validation, and sensitivity testing.
- Leveraged high-performance computing (HPC) to create a data processing and archival system to pull and save user-selected information from a 10TB database to display on a containerized web application.

The 2035 Initiative, UCSB, Santa Barbara, CA (*remote*)   [*R, Python, QGIS, HTML, CSS, SCSS, JS*]
Environmental Data Scientist (10/23–10/24)
- Compiled and synthesized datasets, conducted literature reviews, developed surveying methods, interactive maps, and other informative data visualizations, web scraped data, trouble-shot, and optimized workflows.
- Interpreted survey response trends to evaluate the adaptability and impact of policy suggestions. Collaborated with interdisciplinary teams to use this information to develop strategic policy suggestions and solutions which reflect the needs and desires of residents.

UCSD Dept of Atmospheric & Analytical Chemistry, San Diego, CA   [*Excel, IGOR Pro*]
Environmental Data Analyst (12/21–6/23)
- Produced weekly reports using local meteorological and hydrological data to evaluate local climate effects on the quality of air, sea water, storm water, and wastewater with respect to their potential impacts on public health.
- Collected aerosol spray and sea water samples at the Scripps Pier for analysis. Conducted solid phase extractions on sea water samples to aid in the identification of plastic pollutants and contaminants.

Helen Eloyan for Ventura's City Council District 1 – Ventura, CA (*remote*)   [*Excel*]
Campaign Creative Director (9/21–11/22)
- Attended City and Community Council meetings to become familiar with issues of high interest. Condensed and adapted high level writing materials provided by the candidate to be more impactful and palatable for the public.

RELEVANT SKILLS

Technical: R (proficient), Python (proficient), SQL (confident), Git & GitHub (confident), ESRI Products (confident), Microsoft Planetary Computer, Version Control, Markdown, [HTML, CSS, SCSS, JS] (familiar), database management, data analysis, geospatial analysis, statistical analysis, machine learning, web app development, CEQA/NEPA, Google & Microsoft Suite, Slack