



## HSEO Data Science Fellows Job Description 2023-2024

### Background

HSEO is undertaking the Data Analysis, Modeling, and Visualization Initiative to bring in the resources to continue to buildout the energy office's suite of data sets, perform data quality control and analytics, and perform scenario analysis to assess pathways to a net-negative carbon economy. This initiative is a partnership with the Data Science Institute at the University of Hawaii to fund the work of data science fellows to develop, analyze, and visualize specific energy datasets and scenarios, build custom visualization tools such as HAVEN, and develop building energy and transportation data sets within the data governance framework that the Data Science Specialist is developing.

### High Level Position Description

HSEO Data Science fellows will have the opportunity to work in applied data science projects focused on a multitude of facets of Hawaii's energy economy, including transportation, energy system resource planning and modeling, energy efficiency in buildings, and decarbonization. Under the advice and guidance of HSEO's Data Science specialist and in-house analytics team, each DSI-fellow will be involved in developing the focus of their data analysis, visualization, and data product development efforts, congruent to the strategic objectives of the Energy Office. Tasks and duties to be performed within each subject area would include:

- Assessing the extent of existing data gaps
- Participating in meetings with stakeholders to develop a holistic approach to modeling the specific analytical problem at hand
- Streamlining the collection of data from sources
- Conducting analysis on the data to address relevant and specific policy/technology questions
- Synthesize the analysis into visualizations, applications and/or other data products that present actionable insights for HSEO identified audience(s) including energy industry stakeholders, legislators, and the general public.
- When applicable and within the scope of each fellow's individual project tasks, contribute to the design, testing, and development of custom analytical pipelines, algorithms, simulations, models and/or visualization tools to support analytical objectives.