DATA SCIENCE WITH **PYTHON**
MACHINE LEARNING

WEB APPLICATION
SOLAR RADIATION PREDICTION

DATASETS: The datasets used in this project are meteorological data from the HI-SEAS weather station from four months (September through December 2016) between Mission IV and Mission V. HI-SEAS (Hawai'i Space Exploration Analog and Simulation) is a Habitat on an isolated Mars-like site on the Mauna Loa side of the saddle area on the Big Island of Hawaii at approximately 8200 feet above sea level.

OBJECTIVE: To predict the solar irradiance, by running the chosen parameters through a number of algorithms based on 32.686 rows of data and to visualize further details including Machine Learning Models, Predicted Values and Raw Data.

MODEL ALGORITHMS

- Decision Tree
- Linear Regression
- Gradient Boosting
- Random Forest
- Dummy Variable

LANGUAGES

- Python
- CSS

PLATFORMS

- Heroku
- GitHub

LIBRARIES

- Streamlit
- NumPy
- Pandas
- Scikit-learn
- Matplotlib
- Seaborn

FIELDS

- Data Science
- Machine Learning
- Application Software
- Web Servers