



Energy Royalty Partners

Asset Management

Company Background:

Energy Royalty Partners (ERP) is an asset management firm which deploys advanced data analytics in highly fragmented markets in the energy sector to acquire assets on behalf of its investment funds with a current AUM of ~ \$75MM. The principals of ERP have a combined 75 years of experience investing in and managing assets in the energy industry. Primarily, this experience has been in the application of emergent data science tools to better understand, invest, and optimize assets for stakeholders, which have ranged in size from family offices to multinational public companies. ERP has partnered with an established U.S.-based private equity firm to apply its proprietary data science tools and processes to expanding opportunities in the renewable energy industry. Our objective is to provide our investors with attractive risk-adjusted returns through investment in real assets, while optimizing for capital deployment efficiency and continually mitigating downside risk.

Project Description:

Build a python package to obtain attributes of wind turbines using satellite imagery. The primary function would intake coordinates; via public, or commercial, API obtain satellite imagery; apply image ML models; and return wind turbine attributes with confidences. Training data for the model would be from the United States where wind turbine location and attribute data are available. All IP rights will be retained by ERP.

Key Skills: Python, ETL pipelines, image manipulation, & image machine learning models.

Team Size: 3-5 students. Students will be asked to comply with an NDA.

Location: On CSM campus.

Benefits: Exposure to applied analytics dealing with renewables in a finance environment.

Contact:

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