SESCO Enterprises, LLC is a proprietary energy trading firm. SESCO's primary focus is developing a dynamic approach to simulating the physical state of the US electrical grid while modeling the stochastic features that drive market prices and outcomes. This requires a research-oriented approach to portfolio optimization and risk management. SESCO demands a culture of innovation oriented toward systematizing the decision-making process and converting ideas and principles into models eliminating opportunities for error. Innovation and process improvement is necessarily executed in a highly iterative and collaborative manner with continuous feedback as we strive to optimize results. SESCO offers individuals as much responsibility as they can manage and compensates them accordingly.

The Meteorology team at SESCO provides primarily 24–48-hour forecasts for the major energy markets in the United States. Mid and long-range forecasts are also a part of our responsibilities, but the focus is primarily on the next 1-2 days. The meteorologists predict weather conditions for cities, solar, and wind energy and put this information into a report that is delivered to the traders each morning. The morning report is heavily focused on the expectations for renewables (wind & solar) in the next 24-48 hours.

Forecasters typically start their day at 5am, while the quantitative analytical teams start around 8am. Required start times may vary depending on assignments.

Benefits

- Paid internship
- Working in an environment where you will have a great opportunity to learn from veterans in this field
- A team trading environment
- Open office space, with a kitchen & game room

Responsibilities

- Using a programming language of your choice (most likely Python), work directly with the Meteorology & Quantitative Trading team to help develop new tools and applications that improve the forecasting preparation and production efficiency of the Meteorology team
- Projects may include predictive modeling of forecast elements and outcomes
- Gain a basic understanding of how energy markets operate, and the role Meteorologists play everyday
- Ability to analyze current & future weather conditions and their impact on the energy market
- Based on your own experience and knowledge, extend beyond the models, and communicate risk and opportunities to the traders. Basically, beat the models.

Qualifications

- Currently enrolled in an undergraduate/graduate Meteorology program
 - We will accept graduating seniors
- Experience with data processing using programming languages and relational databases (R, Python, SQL, etc.)
- Excellent time management skills
- Demonstrated proficiency in how you communicate both written and verbally
- Ability to assess the atmosphere and make quick forecasts, upon request, for any location within PJM, MISO, SPP, ERCOT & CASIO market regions
- Ability to collaborate with the meteorology team and other departments, but also work on your own in developing forecasts and projects.
- Working knowledge of Microsoft Office Suite, especially Excel, Access, & PowerPoint

Preferred

- Proficient knowledge of Python
- Minor in Energy Business Finance, Economics, Computer Science or Math
- Skilled in economic analysis and analytical reasoning
- A natural curiosity about energy markets and the ability to develop forecasts that may be contrary to consensus

Application/Interview Process:

- Please attach your resume and a cover letter in an email to: bdavenport@sescollc.com & spatterson@sescollc.com
- Application Deadline: 12/1/2022
- Initial interviews will be a video interview conducted over Microsoft Teams: First week of December
- Second round of interviews will be: TBD, but will likely be in-person
- There will be a technical interview involving the evaluation of programming competency

Additional Notes:

Internship timeline: May (whenever you can start) to August (usually 1^{st} or 2^{nd} week). The timeline is flexible and will be structured to fit what works best for you.

You will be expected to come into the office 5 days a week. Currently, working weekends are not expected.

Our new office space is located at: 4350 Northern Pike Suite 220, Monroeville, PA 15146

This is about a 20-25min drive from downtown Pittsburgh.