



**Position:** Program Analyst  
**Terms:** Regular, Full-Time  
**Location:** Irvine, CA  
**Benefits:** Eligible for all company benefits  
**Interviews:** Interviews scheduled as applications processed  
**Target Start Date:** Monday, September 19, 2019

### **COMPANY DESCRIPTION**

The Energy Coalition (TEC) is a California-based 501(c)3 nonprofit with over forty years' experience in partnering with communities, public agencies, private companies, educators and policymakers to design and implement sustainability strategies. As a social change organization, TEC's mission is to create an abundant and healthy world by inspiring others to take responsible environmental actions.

TEC's team consists of passionate self-starters who are motivated by their commitment to creating a sustainable future. We nurture the professional growth of our employees by offering opportunities for staff to apply and develop their skills, encouraging staff to learn from one another, and through in-house training and professional development funds to build expertise. TEC strives to create a great working environment that is open, flexible and collegial. While TEC's team works hard to tackle challenging and meaningful work we also take time to celebrate our successes. If you are looking to join a high performance organization focused on achieving a sustainable future, apply today!

### **POSITION DESCRIPTION**

TEC is seeking a full-time Program Analyst to provide analytical support as we work with a diverse set of clients and partners including the state and local governments, the Department of Energy, National Research Labs, the Linux Foundation and technical partners to develop energy infrastructure decarbonization strategies.

The successful applicant will be responsible for coordinating with various partners in obtaining and wrangling data, securing and warehousing of data, and implementing workflows for energy (retrofit, renewables, and behavioral) analyses. Work will consist primarily of analyzing data, developing computer code, performing sophisticated parametric analyses, and interfacing and presenting the outcome of analysis to internal and external stakeholders. Additionally, the position will require participating in tool development and strategic planning discussions. The position will support programs across TEC's portfolio.

## **JOB RESPONSIBILITIES**

Responsibilities may include, but are not limited to:

### **Data Preparation and Cleaning**

- Clean data sets of time series and geospatial records to ensure accuracy and completeness
- Geocode, standardize and match data addresses
- Test and verify results
- Load data into databases
- Write custom programs (preferably in Python and Ruby) to check data accuracy

### **Database Management and Integration**

- Check performance of the database to ensure performance
- Ensure all backup and redundancy software is running
- Securely connect data to Mulesoft ESB and other database connections
- Explore connectivity to other APIs using OAuth tokens
- Utilize federal data standards including the Building Energy Data Exchange Specification, BuildingSync, Unique Building Identifiers
- Integrate Salesforce to multiple aspects of program workflows.

### **Data Analysis**

- Create design of experiments, parametric analysis and optimization of various problems using **RStudio**
- Create supervised and unsupervised learning training sets and produce optimization results
- Generate visualizations with Microsoft Power BI, D3.js or equivalent methods
- Generate recommendations for optimal data collection practices and modalities
- Create data collection, entry and analysis best practices across programs
- Conduct research as instructed and present findings to internal staff
- Serve as a company-wide resource for TEC

## **QUALIFICATIONS**

- Relevant advanced degree in the fields of data science, statistics, economics, computer science or other applicable field and 3 or more years of experience, or relevant Bachelor's Degree and 5 or more years of experience
- An emphasis in energy related projects is helpful, but not required.
- Mastery of statistical analysis including experimental design principles, uncertainty analysis,
- Intimate knowledge of ArcGIS, ArcPy and ESRI products;
- Fluency in programming languages, including Python/PHP/Ruby and in writing customized programs
- Experience working with large datasets and databases (millions of records)
- Experience working with and managing object relational databases and particularly in PostgreSQL and SQLite.
- Experience with API management platforms including Mulesoft preferred
- Experience working with confidential data and implementing data security measures
- Fluency in standard statistics software packages (e.g. R, STATA)
- Exposure to energy modeling with EnergyPlus, OpenStudio and Modelica
- Experience with Salesforce platform and Google Apps preferred
- Knowledge of California energy policy, politics and governance beneficial, but not required

- Knowledge base with respect to building science principles, theories, and concepts, including thermodynamics, heat transfer, simulation of energy systems in buildings beneficial but not required
- Valid driver's license, insurance, access to a vehicle and willingness to travel throughout Southern California to attend meetings and events\*
- This position may occasionally require work outside of regular business hours, including nights and weekends
- Have active cell phone plan service.

### **COMPANY EXPECTATIONS**

- Ability to work comfortably in a collaborative environment and make contributions to the team and program in a fast paced environment
- Proactive initiative and excellent problem-solving skills with the ability to identify and define the problem, develop solutions, exercise good judgment and make decisions
- Intrinsic sense of high moral code and ethical conduct, and ability to use discretion with confidential information
- Passion for energy efficiency and environmental conservation
- Strong attention to detail that results in concise, consistent work products
- Familiarity with Microsoft Office Suite
- Professional appearance and demeanor

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Must be able to lift 25 lbs
- Must be able to sit for extended periods of time
- Must be able to stand for extended periods of time
- Must have finger dexterity for typing/using a keyboard

### **WORK ENVIRONMENT**

This position requires work in normal office conditions. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **COMPENSATION**

Salary is based on qualifications and experience. TEC offers a competitive benefits package that includes medical, dental and vision insurance; 401(k) retirement plan with partial employer matching; 9/80 work schedule with paid holidays and paid time off.

### **TO APPLY**

To apply for this position, submit your resume and cover letter online at <http://energycoalition.org/job-postings>.

The Energy Coalition is an Equal Opportunity Employer and strives to reflect the diverse community it serves.