



Data Analyst Internship
Decarbonization & Grid Innovation Department
Silicon Valley Clean Energy
Sunnyvale, CA
Type: Temporary, Internship, Fellowship

About Silicon Valley Clean Energy

SVCE is a community choice energy provider serving the majority of Santa Clara County communities, acquiring clean, carbon-free electricity on behalf of more than 270,000 residential and commercial customers. Member jurisdictions include Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and unincorporated Santa Clara County. SVCE was formed in March 2016, inspired by a common interest in taking bold and effective climate action. Since launching, SVCE has exceeded the state mandate to procure 50% renewable energy by 2030, more than a decade ahead of schedule. In 2017, SVCE's power supply had an emissions rate of less than one pound of carbon dioxide per megawatt hour, a 99% decrease in electricity emissions.

In September 2019, SVCE's Board of Directors adopted the Electric Vehicle Infrastructure Joint Action Plan (EVI Plan), which identified key trends, challenges, and solutions for achieving transportation electrification goals through support for charging infrastructure. The EVI Plan can be found here: tinyurl.com/SVCEEVIplan

Internship Description

Silicon Valley Clean Energy (SVCE) is seeking a *Data Analyst Intern* to support SVCE in exploring some key strategic questions about EVs and charging infrastructure. Current questions include:

- How can we best characterize existing charging deployment across sites in our territory, and how has that influenced EV adoption disparities?
- What do other models anticipate the necessary increase in charging deployment to be (and where), and how does SVCE's data align with those findings?
- What are the ramifications for GHG impacts? How do these align with SVCE goals?

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- What can our data tell us about examples of successful charging deployment and the most promising sites for future adoption?
 - How are state or regional EV rebates/incentives being distributed across our customers? Is it supporting equitable EV adoption?

While the focus will be on EVI, the work may also incorporate analysis of electric vehicles, vehicle-grid integration, emissions impacts, key performance indicators, and other relevant topics. Some elements will build on SVCE's previous work in developing the EVI Plan.

To support this analysis, the Data Analyst Intern will be able to leverage SVCE's cloud-based energy data warehouse that contains energy usage, vehicle registration, and building characteristics data. The role will also be responsible for identifying the need for additional data sources and working to obtain them. The Data Analyst will work closely with staff across teams at SVCE to understand what models, visualizations and reports would be most helpful, develop said models where needed, and interpret results and present recommendations.

Sample analyses: examples of the kind of work this role will take on.

- Estimates/maps of existing EV charging
- Estimates/maps of EV adoption
- Tracking trends on EV adoption compared to various types of EV charging (workplace, home, etc.)
- Vehicle adoption trends by customer characteristics
- SVCE-wide, region-wide, state-wide, nation-wide, and global comparisons
- Impact of flexible charging on emissions and cost, based on SVCE generation portfolio
- EV and EVI rebate uptake trends

Sample outcomes: possible work products and how the work may feed into SVCE activities.

- Program concept design for a EV rebate offering focused on improving the ability for underserved residents to take advantage of funding
- Change in the type of sites being targeted for the FutureFit Assist: EV Charging program
- Presentation to SVCE staff and/or the SVCE Board on transportation electrification progress
- Inform design of the upcoming Fleet Electrification program

- New data sharing agreements with other entities to enhance SVCE's knowledge

Qualifications

- Bachelors, masters or PhD in relevant field such as science, technology, engineering, mathematics or other quantitative field
- Programming skills, such as in Python or another interpreted programming language (e.g. R or Matlab)
- Basic understanding of the energy sector, buildings and/or transportation electrification
- Ability to work individually and in teams, as needed
- Excellent written and oral communication skills

Ideal Candidate

- Experience evaluating climate change impacts
- Experience analyzing transportation electrification trends and ideating next steps and possible solutions to key issues
- Excellent programming skills in relevant programming language(s)
- Experience in the design, development and/or execution of data analytics dashboards and tools
- Proficient with GIS software tools
- Self-directed and comfortable operating in a dynamic, fast-paced start-up environment
- Passionate about addressing climate change

The desired internship period is 10-12 weeks, with a June start date. Full-time internship.

Salary Range

Interns will be paid an hourly rate, which will be dependent upon experience and qualifications.

How to Apply

Interested candidates should send a resume and cover letter to SVCE HR (hr@svcleanenergy.org) by April 30, 5PM Pacific Time.