# Proterra
# Modeling Optimization
## *Summer Internship*

### About Elemental Excelerator
Elemental Excelerator helps startups change the world, one community at a time. Each year, we find 15-20 companies that best fit our mission and fund each company up to $1 million to improve systems that impact people's lives: energy, mobility, water, agriculture and beyond. To date, we have awarded more than $30 million to 80+ portfolio companies and funded more than 50 demonstration projects alongside our portfolio companies and local businesses.

In addition to funding startups, we have also supported more than 25 interns and fellows since 2012 to help the next generation of innovators grow and succeed. Proterra is a part of our seventh cohort and we will be funding this internship position.

### About Proterra
Communities are growing and evolving, and with that, our transportation needs are changing. Now more than ever, we need smart solutions that provide safer, more reliable and cleaner transit. Every day, Proterra works to meet those needs, with the world's best-performing zero-emission buses. Our battery-electric buses help fleet operators abandon fossil fuels, improve environmental quality and reduce operating costs. Join the Proterra Revolution.

### Scope of Work
This position will provide detailed computer science / data analysis support to Proterra's efforts related to its Elemental Excelerator project in Hawaii. You will be responsible for coordinating with business and engineering stakeholders to provide tailored solutions for the Hawaii transit market. This is a unique opportunity to work cross-functionally with Engineering and Commercial teams to refine the business model and develop the tools required to make it successful.

There are three primary projects that have been designed and scoped for this internship opportunity.

1. Electric Transit Optimization Modeling
    - Assist in the design and build out of an optimization tool which leverages outputs from existing computer models and layers in additional data sets to provide an optimal scenario for the Hawaii transit customer.

    - Research and understand potential impacts of solar and energy storage to the optimization tool.
2. HECO Tariff Research
    - Gain expertise in HECO electricity tariffs as they pertain to Hawaii transit customers.
    - Analyze Hawaii transit customers' operations to understand their current tariff structure and proposed charging operations.
    - Research scalable solutions for further tariff optimization opportunities.
3. Other duties as assigned
    - Support Elemental Excelerator tasks with regards to project deliverables.
    - Act as in-state liaison for Hawaii stakeholders on behalf of Proterra's Elemental Excelerator project.

## Internship Details

- Compensation: $15.00 per hour
- Duration: June 10, 2019 - August 5, 2019 (exact start and end dates are flexible)
- Hours: Approximately 40 hours per week
- Location: Hawaii or California

## Required and Preferred Qualifications

- Required to be enrolled in a community college, undergraduate, or technical program related to computer science, engineering, economics, or sustainability with a focus in the following fields: computer programming, data analysis, electrical engineering, or sustainability
- Required to be available for the duration of the internship (minimum 8-weeks), identified dates are from June 10, 2019 through August 5, 2019
- Fluency with either MathWorks software, R programming, or Python is highly desirable
- Should be passionate about clean energy and possess a scrappy start up mentality
- Ability to self-direct and work independently and know when to ask for help

## How to Apply

Please email your cover letter, resume, and field related/technical experience to: sales@proterra.com with the subject line: "Modeling Optimization Internship".