



<b>Company Name</b>	CoolGreenPower LLC
<b>Company Website</b>	<a href="https://www.coolgreenpower.com">https://www.coolgreenpower.com</a>
<b>Location</b>	Greater Boston (remote)
<b>Job Type</b>	Seasonal
<b>Salary</b>	\$18/hour, 40 hrs/wk, 12 wks

### **Software Engineering / Back-End Developer Intern – Summer 2024 (Paid-Remote)**

CoolGreenPower (coolgreenpower.com) is a Concord, Massachusetts-based company that focuses on simple, quick and inexpensive solutions to help business owners and government leaders save energy and money.

We are seeking a Software Engineering / Back End Developer intern to continue the responsive web development work on our new SaaS service offering used by building owners, small business owners, and service contractors primarily on their cell phones (but also on tablets or laptops). These users may have responsibility for multiple buildings or businesses.

Data is regularly collected from multiple data sources and processed on a near real-time basis to identify use cases that require review and/or remediation. Users are notified and are guided through a process to respond and resolve use cases. Historical and current data and supporting analytics are available throughout the process. User activity and actions are documented and archived when completed.

The responsive web application is available 24x7x365 so that users can access it wherever they are.

You will be supervised directly by one of the co-founders and will work closely with Front-End and Data Analytics software engineer student interms).

## Job Duties / Responsibilities

- Maintain/enhance existing MongoDB database design schema.
- Build and maintain existing MongoDB databases, development and production environments.
- Maintain/enhance existing Azure Web application.
- Maintain/build data collection processes using third party APIs from multiple vendors and service providers (e.g., Disruptive Technologies, Open Energy, Vataverks, Ambient Weather, and public Utilities)
- Enhance Alerts and Notifications using existing MongoDB databases that have collected data from sensors, data loggers, and third-party APIs.
- Develop/enhance algorithms used to generate Alerts and Notifications based on GoRules or alternative sources.
- Build and maintain existing MongoDB databases for rules-based alerts and notifications for both development and production environments.
- Build archiving capabilities.
- Test data collection using live customer locations.
- Design and develop Data Analytics capabilities.
- Document web application project
  - README file
  - List all the versions of the files along with the major edits you did in each version.
  - Issue tracker
  - API documentation (e.g., what a function does, what the function's parameters or arguments are, what a function returns)
  - Document your code
  - Apply coding conventions (e.g., file organization, comments, naming conventions, programming practices)
  - Licensing information
  - Developer contact info

## Qualifications

- Actively studying for a computer science degree program at Massachusetts college or university or a resident of Massachusetts studying for a computer science degree program at any US college or university
- Database design experience
- Back-end development using Expresssjs, Nodejs, Reactjs, Azure Web App, Azure Functions, MongoDB, and Git
- Accessing third-party data using APIs
- Data processing using Java.
- Self-starter and accountable; can operate largely on their own with minimal supervision.
- Resourceful; able to network with other students and faculty to obtain timely technical guidance/mentoring that the company is unable to provide.