

Challenge: **Upgrade a Web Based Version of Cantera**

Cantera (<http://cantera.github.io/docs/sphinx/html/index.html>) is open source software that is used for modeling chemically-reacting gases. It is not easy to install on local computers, so a web-based version of Cantera (<http://canteraforweb.me/>) was developed by a previous ECS 193 group. This web Cantera package, which uses python, will be used for teaching purposes for the first time in Winter 2018 in EME 161.

I would like to have an ECS 193 student team continue to work on the web Cantera package so that it is enhanced to better meet student and instructor needs. For example, the instructor should have administrative access so that user accounts can be created and deleted. The current version is limited in its example scripts, and only one or two plots can be created at a time. The development of graphical user interfaces for certain common calculations, e.g., for chemical equilibrium, could be added. The EME 161 students can also be consulted during the winter quarter for ideas on how to improve the software from a student perspective.

I would like to be a client of the student team (Option 2).