

Student Opportunity:

The U.S. Geological Survey's Cascades Volcano Observatory (CVO) seeks student assistance to improve the efficiency and types of data that are automatically imported into our volcano monitoring databases.

Project Goals:

Writing scripts (python, shell, etc.) to fetch data; modifying existing import functions (javascript) to import that data into the database; possibly creating new databases with existing structures. Additional services may also include, building tools with React, Django REST API, and FastAPI. Some projects will coordinate with other observatories that use the same data products (California, Alaska, Hawaii, or Yellowstone).

Required Skills:

- Experience with linux operating systems, shell scripts, other computing languages and tools (e.g., c, Java, python, javascript, matlab, Excel)
- Familiarity managing databases and large data sets (e.g., using MariaDB/MySQL, and/or NoSQL)
- Some background in an analytical field, such as physics, engineering, applied math, geophysics, or other Earth science is necessary
- Willingness to independently and solve problems related to data organization, data analysis scripting, and troubleshooting is required
- Oral and written communication skills are necessary
- Some background in web design principles

Principal duty station: Cascades Volcano Observatory (CVO), 1300 SE Cardinal Ct., Vancouver, WA, 98683

Initial training and project planning will be accomplished in-person at CVO. The student may enter the building only during business hours or when a project member is present. The student may work at any time from a telework location, and is responsible for completing work without in-person oversight.

Compensation is commensurate with the level of education and experience: **\$19.11-\$20.81 per hour** Student will be paid by direct P.O., for which student will need to register in SAM.gov for payments. Contract period can be up to a year, with flexible working hours, although a general guideline of 10-20+ hours per week should be expected to make progress on projects. Students should be aware of the upcoming potential requirements for increased in-person work for federal employees.

Student is responsible for all costs of transportation to and from the principal duty station location. The Government does not provide housing, meals or other living expenses while working at the principal duty station. Travel away from the duty station is not expected, except for possible optional field work.

Send Questions and Resumes to: Emily Montgomery-Brown (<u>emontgomery-brown@usgs.gov</u>) By Jan 20, 2025

