Description. Lawrence Berkeley National Lab, Earth Science Division has an immediate opening for a student to work in the general area of code development for peridynamics. Peridynamics is a gridless simulation method which has attractive features for dynamic impact and fragmentation problems; and is only recently being applied to subsurface injection processes (e.g. hydraulic fracturing). The basic goal of the project is to compare the performance and characteristics of simulation tools which have been developed in house compared to open source alternatives (e.g. Peridigm, https://peridigm.sandia.gov). This would be a good experience for students who are interested in

1. Code development, High Performance Computing (HPC) and parallel computation
2. Learning about peridynamics and other meshfree methods
3. Multi-physics simulations (thermoporoelasticity)

Both undergraduate and graduate students are invited to apply.

Qualifications. Some computer programming experience is required. Experience in C/C++ is beneficial but not required.

Compensation. Pay is based on year in school and department averages. Work schedule is flexible.

Contact info. Please send a resume and brief statement of interest to:

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