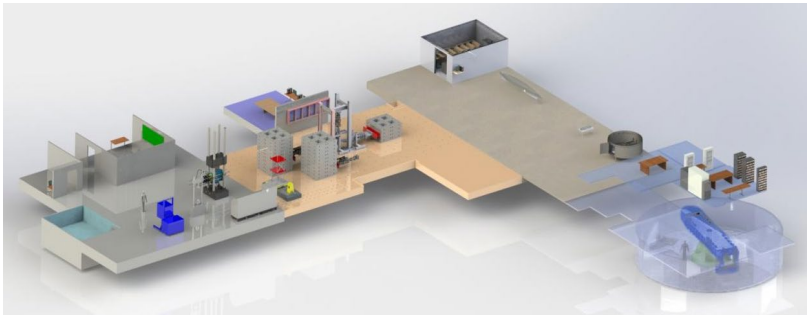
Center for Infrastructure, Energy, and Space Testing
UNIVERSITY OF COLORADO **BOULDER**

Graduate & Undergraduate Research Position(s)



About CIEST: Successful applicants will join a multidisciplinary research team of engineers utilizing the broad testing capabilities of the Center for Infrastructure, Energy, and Space Testing (CIEST), which includes the Geotechnical Centrifuge, Structural Dynamics, and Materials Testing Laboratories. Under common management, CIEST utilizes unique testing capabilities and experienced researchers to collaborate with academic, government, and industry users from a wide range of engineering and earth science fields.

Position Description:

[Undergraduate] CIEST is seeking undergraduate student technicians with an interest in a variety of engineering disciplines, including electrical, structural, geotechnical, mechanical, and environmental engineering, to contribute to experimental research at on-campus facilities (right here in the Engineering Center!). In addition to upper classman, freshman and sophomore students are encouraged to apply with the opportunity for progressive training and long-term engagement. Motivated students with experience or interest in developing skills with machinery (CNC mill, overhead crane, servo-hydraulics load frames, etc.), CAD software (Solidworks or AutoCAD), electronics (sensors, data acquisition, signal processing, soldering, etc.), data analysis (Matlab or Excel), and/or experimental design/interpretation are encouraged to apply.

[Graduate] CIEST researchers are also seeking graduate students to fill a variety of roles across several projects. Please see contact below to learn more about funding opportunities starting as soon as Spring 2023.

Position Offers: Flexible hours (targeting 10-15 hours per week during semesters and 35 hours per week in the summer), pay (starting at $15/hour), hands-on work (opportunities to get dirty), exposure to academic research and industry testing, integrated workout (ability to lift 50 lb is desirable), an excellent addition to your engineering resume, engagement with a diverse group of researchers.

Example Projects:

- Full-scale testing to validate the performance of pipelines and robotically constructed repair technologies for applications in the water and natural gas industries. Opportunities for data analysis, technical writing, videography, etc.
- 400 g-ton geotechnical centrifuge: assist with shaketable development, sensors, and data acquisition to deliver earthquake motions to models in high-g environment
- Marshall Fire research on infrastructure performance and systems operation (e.g., drinking water)
- General lab technician: equipment organization/maintenance, sensor calibration, public outreach

Contact: To apply, please email resume/CV with a description of your interests to:

- Undergraduate students: Cory.Ihnotic@colorado.edu & Katherine.Odell@colorado.edu
- Graduate students: Prof. Brad Wham (Brad.Wham@colorado.edu)
- Related links: https://www.colorado.edu/center/ciest/