

Research Experiences for Undergraduates (REU) Opportunity

REU in Data-enabled Science and Engineering

Program start: JUNE 22, 2020

New sources of data from high-throughput experiments, observational studies, and simulation are transforming all of science and engineering. In this new era of data-enabled science and engineering, discovery is no longer limited by the collection and processing of data, but by data management, knowledge extraction, and the visualization of information.

The REU in Data-enabled Science and Engineering (RDSE) will provide support for a select group of undergraduates to participate in data-enabled science and engineering research under the mentorship of UW Chemical Engineering's world-class faculty and graduate students. Students will complete a nine-week immersive research project in a single lab leading to an abstract and poster.

PROGRAM GOALS

- Encourage students to pursue STEM careers
- Provide exposure to hands-on wet and dry-lab research
- Introduce students to the core areas of data science: data management, visualization, and statistical and machine learning
- Improve student knowledge about the nature of research including ambiguity, evolving understanding, and the openended nature of research
- Develop student inquiry skills including formulating research questions, designing experiments, analyzing data, communicating results, and envisioning future steps
- Impart relevant, state-of-the-art content in biomaterials, clean energy, molecular simulation, nanoscience, nanomanufacturing, and systems and synthetic biology

HOW TO APPLY

Prepare a short personal statement, short description of a data science problem or application that interests you, your unofficial transcript, CV, and contact information for two academic references. For additional details and the application form, visit:

www.cheme.washington.edu/RDSE

Deadline: FEBRUARY 14, 2020

RDSE is open to students who have completed two years of college, community college, or tribal college. A stipend of \$5,000 and on-campus housing (if non-local) will be provided.

Questions? Please contact Prof. James Carothers at jcaroth@uw.edu