



UNIVERSITY of WASHINGTON

CHEMICAL ENGINEERING

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Research Experiences for Undergraduates (REU) Opportunity

Pilot REU in Data-enabled Science and Engineering

JUNE 24 – AUGUST 23, 2019

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 Pilot REU in Data-enabled Science and Engineering (PRDSE) 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 open-ended 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/pilot-reu-2019

Applications received by **April 25** will receive full consideration.

PRDSE 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