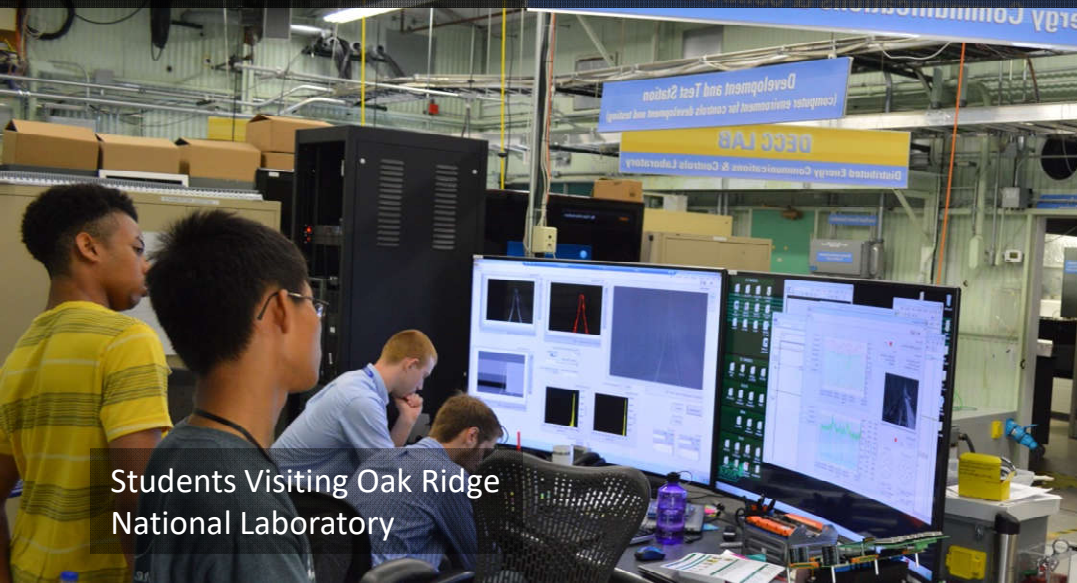


Research Experience for Undergraduates



Students Visiting Oak Ridge National Laboratory

The Center for Ultra-wide-area Resilient Electric Energy Transmission Networks (CURENT) is an NSF/DOE Engineering Research Center. Its research goal is to develop the tools and knowledge needed to adapt to the energy needs of the future, which include greater abilities to predict, monitor, convert, and control energy flows.

The Research Experience for Undergraduates (REU) Program pairs participants with graduate mentors to work on one of the center's projects. Below are some of the most recent projects.

Past Summer Projects

<http://curent.utk.edu/reu>

HVDC Transmission Modeling

Development of Real-time, fast-acting Grid Instability Estimator

Apply Static VAR Compensators to Control Reactive Power

Privacy Protection with Smart Meters

Estimating power consumption and incentives need to change demand

Load Identification by Monitoring Household Power Supply

DC-DC Buck Converter Efficiency Analysis

Frequency Analysis and Mapping to determine where to place fast acting energy storage devices

Ultra-small DC-AC Inverter Testing

Transmission Line Fault Modeling using Hardware-based Model

Program

Dates: June 4th – July 27th, 2018

Length: 8 Week Program

Salary: \$520 per Week

Travel Stipend: Up to \$500

Housing: Provided at No Cost

Apply: <http://curent.utk.edu/reu>

Applicants should be:

- US Citizen or Permanent Resident
- GPA of 3.0 or Greater
- Sophomore, Junior or Non-graduating Senior
- Computer Science, Engineering, Physics, and Related Majors Eligible

Applicants must provide:

- Completed Online Application
- Unofficial College Transcript
- Two letters of recommendation
- Personal Statement

Contacts

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Claire Duggan

Northeastern University
<https://stem.neu.edu/summer/reu/>

