



CCT REU

This Research Experience for Undergraduates (REU) is a ten week program at the Center for Computation & Technology (CCT) at Louisiana State University (LSU).

With research groups exploring gravitational waves, complex emergent phenomena in materials science, or computational music, students work collaboratively on a wide variety of cutting edge interdisciplinary computational science projects.

Participants also learn programming, high performance computing, innovative cyberinfrastructure tools, and are exposed to international collaborations.

Our 2016 summer program dates are May 23 through July 29.

We invite undergraduates, community college students, and high school seniors to apply to this REU!

RESEARCH PROJECTS

Possible REU computational projects are from CCT's five focus areas and include:

- Core Computing Sciences: tangible visualization, computational frameworks, scientific visualization, mesh generation, forensic data restoration and repair, medical image analysis.
- Coast to Cosmos: computational astrophysics, simulations of loop quantum gravity, coastal modeling, geothermal reservoir simulations, simulation of inertial flows for high productivity gas wells.
- Material World: strongly correlated electronic systems, thermophotovoltaics, molecular simulations in nanotechnology, accelerated physics and chemistry codes using GPUs, biomaterial transport, computer-aided drug design.
- Cultural Computing: laptop orchestra, mobile music, interactive image systems, value extraction from financial digital data streams.
- System Science and Engineering: advanced parallel computer architecture and programming environments, high speed network protocols, applications, and algorithms, cybersecurity, compiler research.



REQUIREMENTS

Students should be:

- graduating at least one semester after completion of the REU, or high school seniors attending college in the Fall
- interested in a major that is within the computational science umbrella (leaves out few majors as it includes all sciences, mathematics, engineering, finance, statistics, etc.)
- considering a career in research and/or graduate school in their major
- US citizens or permanent residents
- and have at least a 2.75 GPA

AWARD

A stipend of \$5,000, free housing in university dormitories, and up to \$600 in travel expenses to and from Baton Rouge, Louisiana.

Apply online by March 1, 2016



<http://reu.cct.lsu.edu/>