LANL Summer Schools

Educational internship opportunities for undergraduate and graduate students

The goal of summer schools is to augment student learning through focused lectures coupled with hands-on real-world projects. The Information Science & Technology Institute (ISTI) organizes, co-sponsors, and/or supports the following summer schools. ISTI enables LANL’s Integrating Information, Science, and Technology for Prediction (IS&T) pillar to address emerging challenges in national security, societal prosperity, and fundamental science.

Visit http://isti.lanl.gov for more information and to apply to these internship opportunities.

- **Parallel Computing Summer Research Internship**
  Providing students with a solid foundation in modern high performance computing (HPC) topics integrated with research on real problems encountered in large-scale scientific codes.
  **Target Student:** Upper-level undergraduate and early graduate students; [http://parallelcomputing.lanl.gov](http://parallelcomputing.lanl.gov)

- **Computer System, Cluster, and Networking Summer Institute (CSCNSI)**
  Learn the basics of high performance computing system administration. Students work in small project teams to execute real-world projects on computer clusters that they have assembled and configured.
  **Target Student:** Upper-level undergraduate and early graduate students; [http://clustercomputing.lanl.gov](http://clustercomputing.lanl.gov)

- **Co-design School**
  Team research project for graduate students from varying backgrounds (usually CS, computational physics, and mathematics) to work on a computational co-design topic, such as novel programming models on a specific application, such as Hydro- and Molecular dynamics.
  **Target Student:** Upper-level graduate students; [http://codesign.lanl.gov](http://codesign.lanl.gov)

- **Data Science at Scale School**
  The Data Science at Scale School is active year round to recruit outstanding students to the laboratory to participate in data intensive science projects. Particular focus is placed on using big data technologies to gain insights from science data.
  **Target Student:** Upper-level undergraduate and graduate students; [http://datascience.lanl.gov](http://datascience.lanl.gov)

- **Cyber Security Summer School**
  Students will learn the necessary concepts and skills for cyber incident response. In addition to classroom training and lectures, students will spend most of their time working with a mentor on a small team project.
  **Target Student:** Junior, Senior, or Master's student; [http://cyberfire.lanl.gov/toaster.html](http://cyberfire.lanl.gov/toaster.html)

- **Applied Machine Learning Summer Research Internship**
  Team research projects for graduate students from varying backgrounds (computer science, statistics, mathematics, or domain science fields) to apply machine learning methods to real-world scientific data analysis problems.
  **Target Student:** Upper-level Graduate students; [http://aml.lanl.gov](http://aml.lanl.gov)

LANL student summer fellowships:

- **Computational Physics Workshop**
  [http://compphysworkshop.lanl.gov](http://compphysworkshop.lanl.gov)

- **Los Alamos Dynamics Summer School**
  [http://ladss.lanl.gov](http://ladss.lanl.gov)