



Project Title

Nondestructive Evaluation (NDE) to Defend the Homeland

Project Reference Code: DNDO-LLNL-Martz

Hosting Site

Lawrence Livermore National Laboratory
Livermore, CA

Project Description

Interdicting weapons of mass destruction such as special nuclear materials and radiological dispersal devices at our borders requires several different types of detection technologies. The Nondestructive Characterization Institute (NCI) team at LLNL is researching and developing x-ray and other methods to increase the probability of detection for special nuclear materials while reducing the false alarm rate caused by non-threat materials. The LLNL team specifically is looking for students to help develop NDE and data analysis methods. For border protection applications, we are also looking for students interested in analyzing high-energy (9-MeV bremsstrahlung) x- radiography, muon tomography, backscatter and nuclear resonance fluorescence.

Disciplines

Computer Systems Design (including Signal Processing)
Systems Engineering
Physics (General)
Engineering (General)

Mentor(s)

Harry Martz, martz2@llnl.gov, 925-423-4269
Steve Glenn, glenn21@llnl.gov, 925-423-7445

Internship Coordinator

Barry Goldman, goldman1@llnl.gov, 925-422-5177

The name and contact information of the hosting site internship coordinator is provided for further assistance with questions regarding the hosting site; local housing availability, cost, or roommates; local transportation; security clearance requirements; internship start and end dates; and other administrative issues specific to that research facility. If you contact the internship coordinator, identify yourself as an applicant to the DNDO Summer Internship Program.

Interns will not enter into an employee/employer relationship with the Hosting Site, ORAU/ORISE, DHS, DNDO or DOE. No commitment with regard to later employment is implied or should be inferred.