Through the synergy and leveraging of resources and expertise at three minority serving institutions and two world class national laboratories, we will educate scientists and engineers in the underlying science of nuclear security and nonproliferation.

Vision of the CONsortium on Nuclear sECurity Technologies:

Through the synergy and leveraging of resources and expertise at three minority serving institutions and two world class national laboratories, we will educate scientists and engineers in the underlying science of nuclear security and nonproliferation.

Eligibility Requirements

- US Citizen or Permanent Resident
- PhD in Physics, Engineering Fields, Materials Science, Computer Science and Related Disciplines

Application / Deadline

Submit application with Current CV and personal Statement to https://jobs.utsa.edu/postings/14529

Please direct all questions to NNSACONNECT@utsa.edu

Seeking Postdoctoral Fellow Applicants

Computational Program Overview

A multi-disciplinary team at the University of Texas at San Antonio is seeking a highly talented and motivated postdoctoral fellow skilled in machine learning for a multi-year, NNSA-funded position. The collaborative project involves UTSA Departments of Engineering (ECE and ME), Computer Science, and Physics, as well as external partnerships with the University of Las Vegas Nevada, St. Mary’s University, Argonne National Labs, and Los Alamos National Labs.

The postdoctoral fellow will be engaged in collaborative efforts between all departments. His/her main duties include:

- Perform research in the area of machine learning for nuclear security. Research will focus on algorithms for analyzing data pertaining to nuclear security problems.
- Mentoring undergraduate and graduate students in their research projects
- Accomplish research goals in collaboration with the College of Engineering and College of Science researchers.
- Participate in CONNECT activities and present results in DOE meetings and national conferences.
- Publish papers in peer-review journals.
- Perform other duties as assigned

The ideal candidate should have a demonstrative background in machine learning and deep learning, include signal processing and pattern recognition. Strong programming skills in Python and machine learning libraries is required.

CONNECT Areas of Research

- Fuel Cycle Materials
  - Fabrication
  - Materials Property Determination
- Advanced Characterization and Forensics
  - Thermal Analysis
  - Optical photoacoustic spectroscopy
- Computational Modeling and Data Analytics
  - Big Data and Machine Learning
  - Uncertainty Quantification and Sensitivity Methods
  - Visual Analytics
- Detection Science