

# Research Associate and Research Assistant Positions

(US Citizenship required)

## Project Title

- IDEAS: Improving the DEtection of shielded contraband by advancing Algorithms and Systems for Mobile Active Interrogation using Neutrons (MAIN)

## Funding Agency

- Department of Homeland Security

## Research Tasks

- Programming and implementation of the machine learning methods for classification and regression
- Data processing, results generation and plotting, report/paper writing
- Meetings with Advisor Prof. Qi Cheng, collaborators and/or sponsors, presentations
- Advanced: novel machine learning methods design and development

## Qualifications

- A bachelor's degree or higher in electrical engineering, computer engineering or computer science
- Knowledge of probability theory, random signal processing, optimization
- Strong programming skills and experience in Python or MATLAB

## How to Apply

- Interested students should contact Prof. Qi Cheng (qi.cheng@okstate.edu) by email with the subject line "RA application - IDEAS".
- Please include your resume and a letter describing your specific interests, as well as providing evidence of your qualifications.

## Prof. Qi Cheng's background

- Professor Qi Cheng is an associate professor at the School of Electrical and Computer Engineering, Oklahoma State University, where she has conducted research in areas of statistical signal processing, machine learning, data science, and data fusion.