Opportunity Title: Control Radiation Detector via Android
Opportunity Reference Code: DOE-MSIPP-18-3-SRNL
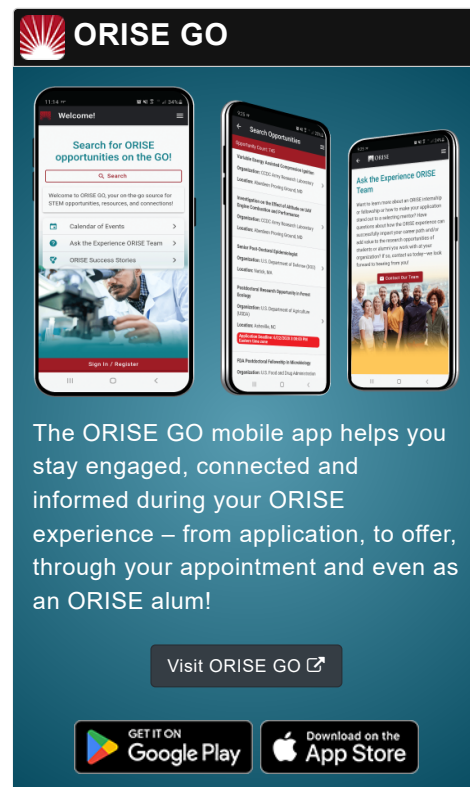
Organization	U.S. Department of Energy (DOE)
Reference Code	DOE-MSIPP-18-3-SRNL
How to Apply	A complete application must include the following to be considered:

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

ORISE GO

- Completion of all required fields in the application and successful application submission
- Undergraduate or graduate transcripts as appropriate
- Two recommendations

If you have questions, send an email to Kerri Fomby at kerri.fomby@orau.org. Please include the reference code for this opportunity in your email.

For technical questions, please contact Vivian Cato at vivian.cato@srnl.doe.gov.

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO

GET IT ON Google Play   Download on the App Store

Application Deadline	1/12/2018 11:59:00 PM Eastern Time Zone
Description	The Minority Serving Institutions Partnership Program (MSIPP) Internships is a new program to promote the education and development of the next generation workforce in critical science, engineering, technology, and math (STEM) related disciplines that complement current and future missions of DOE national laboratories. The MSIPP Internship program is designed to provide an enhanced training environment for next generation scientists and engineers by exposing them to research challenges unique to our industry.

MSIPP Interns will be given the opportunity to complete Summer Internships aligned with ongoing U.S. Department of Energy Office of Environmental Management (DOE-EM) research under the direction of a host national laboratory. The internship will be performed at the host national laboratory, utilizing their facilities and equipment under the guidance of a research staff member.

Minority Serving Institutions are institutions of higher education enrolling populations with significant percentages of undergraduate minority students.

Project: This project will focus on refining a previously developed Android application that is used to control radiation detectors via USB. The goal will be to develop 2 applications:

- A full featured user application that can control all features of the radiation detector from the user interface as well as acquire, display, and save a measured spectrum.
- The second application will use the same backend as the first application, except will display a minimum of user controls. This application will be designed to be operated by

Opportunity Title: Control Radiation Detector via Android
Opportunity Reference Code: DOE-MSIPP-18-3-SRNL

a minimally trained personnel.

If time is available, we will begin work on developing code to detect the type of radiation detector connected to the Android device and develop a driver or drivers to communicate appropriately with these devices.

Location: This internship will be located at Savannah River National Lab.

Salary: Selected candidate will be compensated by either a stipend or salary, and may include one round trip domestic travel to and from the host laboratory. Stipends and salaries will be commensurate with cost of living at the location of the host laboratory. Housing information will be provided to interns prior to arrival at the host laboratory, and will vary from lab to lab.

Application Deadline: January 12, 2018

Expected Start Date: The program is 10 weeks in duration, starting May 21, 2018. Start date is flexible based on laboratory and candidate availability.

Qualifications

Eligible applicants must:

- Be a citizen of the United States,

- Be at least 18 years of age**,**

- Currently enrolled as a full-time undergraduate or graduate student at an accredited Minority Serving Institution,http://orise.orau.gov/msipp/documents/approved-msi-school-list.pdf,

- Working toward a science, technology, engineering, or mathematics (STEM) degree,

- Have an undergraduate or graduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale, and

- Pass a drug test upon selection to participate in the MSIPP*The process and timing for drug testing varies from lab to lab.Use of Marijuana/Cannabis or its derivatives if prescribed is legal in some states.However, having these drugs in your system is NOT legal at United States Federal Contractor sites and National Laboratories.

Required Knowledge, Skills, Work Experience, and Education

Successful candidates will:

- Be a current undergraduate or graduate student pursuing a degree in computer science, chemistry, physics, electrical

Opportunity Title: Control Radiation Detector via Android
Opportunity Reference Code: DOE-MSIPP-18-3-SRNL

> engineering, mathematics, life , health, and medical sciences, or related field.

Desired Knowledge, Skills, Work Experience, and Education

It is desirable for the candidate to have:

- At a minimum, student should be familiar with Java and C++ programming. Preferred candidates will be experienced Android developers, with experience using the JNI to talk with native C++ code. Ideal candidates will be experienced in developing hardware driver software for Linux.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Currently pursuing a Bachelor's Degree or Master's Degree.
- **Overall GPA:** 3.00
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Computer, Information, and Data Sciences** (16 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (1 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Physics** (16 👁)

Affirmation

I certify that I am at least 18 years of age and a US citizen, and am currently enrolled as a student in a degree seeking undergraduate or graduate program in a STEM field at an accredited Minority Serving Institution (MSI).