Opportunity Title: Robotic and Sensor Systems Internship (2 internships)
Opportunity Reference Code: DOE-MSIPP-18-14-SRNL

Organization	U.S. Department of Energy (DOE)
Reference Code	DOE-MSIPP-18-14-SRNL
How to Apply	A complete application must include the following to be considered:

- 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.

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: The project involves participating as a member of a R&D engineering team identifying, developing and testing sensor technologies for remote inspections, e.g. 3-D mapping via LIDAR, high resolution video, concrete thickness, radiation detection, air quality monitoring. Developing the sensor data collection system and user control interface to the robot/remote system. Integrating sensors onto a robotic platform or remote system. Interns will participate on the team according to their expertise and education.

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

Salary: Selected candidates 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 current undergraduates (rising junior or above) or graduate students (MS) pursuing a degree in Computer Science, Earth & Geosciences, Engineering, Chemistry, or Physics.

Desired Knowledge, Skills, Work Experience, and Education

It is desirable for the candidate to have:

- Education and experience working with sensors and/or robotic systems,
- Software programming of robotic sensors and experience with the Robotic Operating System (ROS) and/or C++ or C#, and
- Experience with concrete sensors for remote applications.

Interns will participate on the team according to their expertise and education.

Eligibility Requirements
- **Citizenship:** U.S. Citizen Only
- **Degree:** Currently pursuing a Bachelor's Degree or Master's Degree.

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- **Overall GPA:** 3.00
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Computer, Information, and Data Sciences** (16 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (2 👁)
  - **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).