

U.S. Department of Education  
Minority Science and Engineering Improvement Program  
(MSEIP)  
*and*  
U.S. Air Force Research Laboratory  
Information Directorate

2025 Summer Internship v1 – 10.8.2024



Photo provided by Inter American University of Puerto Rico, Inc., PR P120A220029

**APPLY:**

**Application materials and/or questions** should be submitted to [Timothy.Kroecker@us.af.mil](mailto:Timothy.Kroecker@us.af.mil)

**Required Materials for a Complete Application:**

1. Updated **resume** including related courses/skills and any additional experiences that qualify you for this research internship. Candidate first and last name should be part of the resume file name (e.g., John Smith resume.doc)
2. **Official or unofficial transcript.** Candidate first and last name should be part of the transcript(s) file name (e.g., John Smith transcript.doc)
3. Description of your **interests, career goals, coursework, and experiences** that qualify you for this program.
4. **Application Form.** Candidate first and last name should be part of the resume file name (e.g., John Smith application.doc)

**Deadline:** Friday, November 8, 2024

**Program Dates:**

May 28, 2025 - August 1, 2025 (10 weeks)  
[Dates may change.]

**Expenses:**

Students will receive a \$8000 stipend (equivalent to \$20/hr.). Additional funding will be provided to support travel, transportation, \*housing, and meal allowance by the college through the **MSEIP grant**.

\*Students are required to stay in the assigned dormitory for this program.

**Eligibility:**

GPA equals 3.0 or above

(Students graduating in May or summer 2025 are not eligible.)

Majoring in Computer Science, Electrical Engineering, Physics, or Mathematics

**Location:** Rome, NY

## **Research Project Description:**

The Air Force Research Laboratory - Information Directorate's vision is to lead the Air Force and Nation in command, control, communications, computers, and intelligence (C4I) and cyber science, technology, research and development. Our mission is to explore, prototype, and demonstrate high-impact, game changing technologies that enable the Air Force and Nation to maintain its superior technical advantage.

Qualifications of the student that will increase the likelihood of the project's success (e.g., applicable course and lab work, research or work experience, etc.):

This project will benefit from applicants with proficiency in Unity Game Engine (preferred but not necessary), C#, Git, 3D Modeling, Software Engineering, Networking, and Software Engineering, Computer Science, Electrical Engineerin, Physics or Mathematics background.

The ability and willingness to learn new programming languages will be instrumental to the success of the project.

## **Specific projects interns can select from:**

### **1. Cyber**

Leveraging and shaping the cyber domain to the nation's advantage through computer programming, computer engineering using tools such as block chains.

### **2. Information Exploitation**

Using computers and algorithms to identify, analyze, and transform big data into information upon which decisions can be made.

### **3. Command and Control**

Mastering and controlling complex cross-domain (air, land, sea, and space) situations through use of autonomy, machine learning, and decision support.

### **4. Communications**

Putting the right information into the right hands at the right time through connectivity and dissemination of systems and information.