
How to acquired Professional experience during my undergraduate studies

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Who I am?

- Full Professor in the CS Program at UPR Arecibo
- Director of Robotics Development Laboratory
- Mentor of Undergraduate Research Course
- Part of CAHSI
- Mentor of CSSA
- NASA Solar System Ambassador
- Robotics and Space Exploration Lover
- Mother and Wife



Objective

- Know the available opportunities to gain professional experience before graduating
- Advise that students can take the opportunity to complete a period of work experience to ensure they have a competitive advantage over their peers

Agenda

1 REU

2 Internship

3 Co-Op Positions

Research Experiences for Undergraduates (REU)

- **REUs** are competitive summer research programs in the United States for STEM undergraduates students.
- The programs are sponsored by the National Science Foundation (**NSF**), and are hosted in various universities.
- **REUs** tend to be specialized in a particular field of science.

Research Experiences for Undergraduates (REU)

- REU sites typically consist of ten undergraduates working in the **research** program of the host institution either in the US or abroad with a mentor (faculty)
- Must be citizens or permanent residents of the US.
- The length of the application **ranges** from a single letter of reference without supporting materials all the way up to something comparable to a college admissions application.
- The programs **could require** between one and three letters of reference, a transcript, 0-2 essays, a letter of interest, a resume, a biographical form, or some combination thereof.

Research Experiences for Undergraduates (REU)

- There is an emphasis on including populations underrepresented in science—women, underrepresented minorities, and persons with disabilities.
- Students participating in REU sites are generally provided with:
 - A stipend (\$4,000–\$8,000 for 10 weeks of work)
 - Housing
 - Transportation to and from the site
 - And often arrangements for food
- It is a good way to learn about research and academic careers


Research Experiences for Undergraduates (REU)

- How to search and when?
- Search REU NFS

https://www.nsf.gov/crssprgm/reu/reu_search.jsp



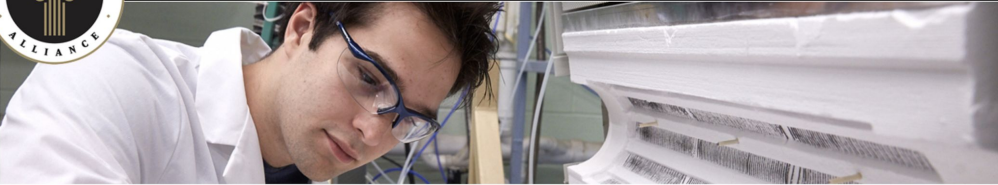
The Leadership Alliance



A continuum of mentoring: A legacy of scholars

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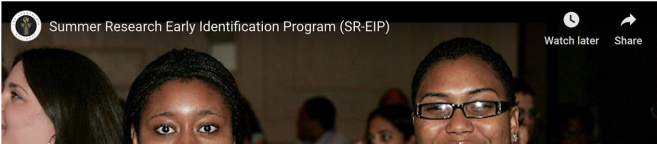


Programs

- Undergraduates
- Summer Research
 - Apply
 - Mellon Initiative
 - Research Sites
- Workshops
- Graduate Students & Postdocs
- Faculty
- Leadership Alliance Alumni

Summer Research - Early Identification Program (SR-EIP)

SR-EIP is a fully paid summer internship that provides undergraduates with training and mentoring in the principles underlying the conduct of research and prepares them to pursue competitive applications to PhD or MD-PhD programs. See more about SR-EIP in the video below.





<https://theleadershipalliance.org/summer-research-early-identification-program>



Internships

An internship is a period of work experience offered by an employer to give students and graduates **exposure** to the working environment, often within a specific industry, which relates to their field of study.

Most internships last between a month and three months.

Internships are usually part-time if offered during a university semester and full-time if offered during the vacation periods.

An internship provide practical skills, workplace experience and greater knowledge of that industry, in exchange for the employer benefiting from your labour.

Internships

Unlike REUs, the benefits vary from company to company and it is very important to verify the suitability of each offer.

Internship Benefits



Paid
Time Off



Holiday &
Sick Leave



Travel
Reimbursement**



Competitive
Pay



Mentorship
Programs



Extracurricular
Activities



Housing
Assistance**



Access to
National Cryptologic
School Courses

***If eligible. See our website for more information.*

<https://www.intelligencecareers.gov/nsa/nsastudents.html>



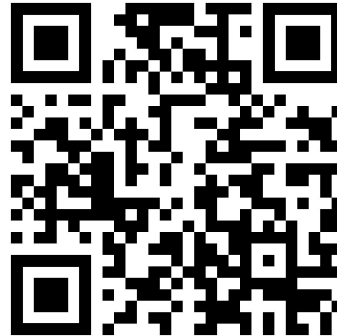
Internships

<https://computing.llnl.gov/careers/interns>



Data Science program, an HPC program and a new DevOps program for the summer. That is in addition to our regular summer internship opportunities.

The application deadlines for most of the internship programs is January 31.



Internships

Other option:



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Science Undergraduate Laboratory Internships (SULI)

Eligibility
Benefits
Participant Obligations
How to Apply
Key Dates
Frequently Asked Questions
Reporting Harassment or Discrimination
Contact

Science Undergraduate Laboratory Internships (SULI)

<https://science.osti.gov/wdts/suli>



Program Announcements

SULI Program Overview

The Science Undergraduate Laboratory Internship (SULI) program encourages undergraduate students and recent



Internship

Other options:

- Lockheed Martin
- Northrop Grumman
- L3 Harris
- Ratyon
- Space X
- NASA (<https://www.usajobs.gov/> y <https://nasacentral.force.com/s/explore-opportunities>)
- Abarca (<https://grnh.se/f0ef437d3us>)
- RedVentures
(<https://www.redventures.com/careers/locations/puerto-rico>)
- Google <https://careers.google.com/>

Cooperative education (or co-operative education)

- Co - op is a structured method of combining classroom-based education with **practical work experience**.
- Generally provides academic credit for structured job experience.
- Involves a partnership between the academic institution and the employer, and **generally** is both paid and intended to advance the education of the student.
- Like the internships, the benefits **vary** from company to company and it is very important to verify the suitability of each offer

Cooperative education (or co-operative education)

- Example:
 - **Cooperative Education Program** [Applies To](#)
 - *NSA's Co-op Program accepts applications twice a year, typically winter/early spring and in the fall.*
 - Co-op students will operate under a rotational program, alternating semesters of full-time work with full-time study from entry into the program until graduation. We require a minimum of 52 weeks of co-op work experience prior to graduation. During your work tour, you will work a regular 40-hour week. Each work tour is designed to reveal the specific areas you may want to focus on as a career.



My advise

At least three:

- Academic (REU)
- Federal Agency or National Lab (internship or co-op)
- Industry (internship or co-op)

Sky is the limit!

Never forget it!



Thanks

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