## What is Computing Research? How Can I Participate?

### Why participate in research opportunities?

- Earn stipend, scholarship, or credit
- Think through (and even solve!) challenging problems
- Gain knowledge and expertise
- Work with accomplished researchers
- Prepare for graduate school
- Learn life-long skills
- Build professional relationships
- Apply and discover new ideas and methodologies
- Improve your communication abilities
- Contribute to a specific area of knowledge

### How do you find research opportunities?

Ask your professors, advisor for opportunities. Visit research groups in your department.

Search for “Undergraduate Research Experience” on the web.

Here’s just a sample of what you’ll find:

- CRA-W Undergraduate Research Programs: CREU and DREU, see back of this page
  - [http://cra.org/cra-w/for-undergraduates/](http://cra.org/cra-w/for-undergraduates/)
- National Science Foundation Research Experiences for Undergraduates (REU):
- COmputer ScieNce UndErgraduate Research (CONQUER) resources:
  - [http://conquer.cra.org/students/finding-research-opportunities](http://conquer.cra.org/students/finding-research-opportunities)
- Department of Navy (DoN) Programs for Undergrad and Grad Students:
  - [http://nreip.asee.org/](http://nreip.asee.org/)
- NSERC USRA in Canada:
  - inquire with your department to find out how it works at your university.
- UROP Undergraduate Research Opportunities Programme at Imperial College London (UROP):
  - [http://www.imperial.ac.uk/urop](http://www.imperial.ac.uk/urop)
- IIT Summer Internships:
  - [http://www.researchx.in/index/iit-hyderabad-summer-internship](http://www.researchx.in/index/iit-hyderabad-summer-internship)

### When to apply?

<table>
<thead>
<tr>
<th>Private Companies, Government Labs</th>
<th>Mid Fall – February</th>
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<tr>
<td>DREU and NSF REU programs</td>
<td>Mid February to Mid March</td>
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<td></td>
<td>e.g., DREU due date is Feb 15</td>
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<tr>
<td>CREU program</td>
<td>Mid May</td>
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<tr>
<td>Your College / University</td>
<td>Often early in the calendar year</td>
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These are typical final due dates – many places start accepting applications and awarding positions much sooner. **Start Early!**
CRA-W Undergraduate Research Programs

(For more comparison information: http://cra.org/cra-w/creu/#compare-to-dreu)

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<thead>
<tr>
<th></th>
<th>DREU</th>
<th>CREU</th>
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<tbody>
<tr>
<td>Time</td>
<td>Summer (10 weeks)</td>
<td>Academic year plus optional summer</td>
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<tr>
<td>Stipend per student</td>
<td>$7000 per summer; relocation travel assistance when appropriate</td>
<td>$1500 per semester and $4000 during optional summer extension</td>
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<tr>
<td>Location</td>
<td>Mentor’s institution</td>
<td>Student’s institution</td>
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<tr>
<td>Deadline to apply</td>
<td>February 15</td>
<td>May 18</td>
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What to include in your Undergraduate Research Resume

- Relevant courses
- GPA - You’ll also typically need to submit a transcript
- Major projects
- Publications (if you have them; most undergraduates don’t)
- Work experience
- Languages, tools, etc. including level of proficiency

Be careful, neat, and honest

Additional Resources:

CRA-W resources for undergraduates: http://cra.org/cra-w/for-undergraduates/

Virtual Undergraduate Town Hall Series: http://cra.org/cra-w/undergrad-town-hall-series/