

Follow Up Survey for Past NSF CISE REU Mentors

1. Introductory Text

Thank you for your interest in this survey. This survey should take no more than 20 minutes of your time. For accessibility purposes, we recommend using either Chrome or Firefox web browsers for this survey.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is . Public reporting burden for this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation Alexandria, VA 22314.3145-XXXX

Throughout this survey, we will use the terms "computing" and "computing-related".

"Computing" or "computing-related" includes the fields below and other similar fields:

- Computer Science
- Computer Engineering
- Software Engineering
- Electrical and Computer Engineering
- Systems Engineering
- Computer Hardware Engineering
- Computing Information Systems
- Information Systems, Information Science
- Informatics, Bioinformatics
- Cybersecurity
- Data Science/Data Analytics
- Machine Learning
- Robotics
- High Performance Computing
- Human-Computer Interaction
- Computational Science/Social Science
- Computational Biology
- Computational Economics
- Computational Mathematics
- Any other computing & technology field



2. Academic History

Pro	omp	it: First, we would like to ask about your academic history.
1.	Wł	nat is your highest level of completed education?
		Bachelor's degree
		Master's degree
		Doctoral degree

Academic History: Highest degree is Bachelor's - details

[Displayed if selected Question 1.: Bachelor's degree]

- 2. What was your major in college for your most recent undergraduate degree? Note: If you were a double major, use the next drop-down menu to indicate your second major. If you have more than one undergraduate degree, answer these questions for the most recent one. [List of majors 1]
- Use this drop-down menu to indicate your second undergraduate major. If you did not have a second major, simply leave this question blank. [List of majors 2]
- 4. In which year did you earn your most recent undergraduate degree? [Drop down list of years]
- 5. At which institution did you earn your most recent undergraduate degree? If you do not see your institution on the list, scroll to the bottom of the list and select 'Other'.

 [List of institutions]

[Displayed if selected Question 5.: Other]

6. At which institution did you earn your most recent undergraduate degree?

[ALL SKIP TO SECTION "CURRENT STATUS"]

Academic History: Highest degree is Master's degree - details

[Displayed if selected Question 1: Master's degree]

7. At which institution did you earn your most recent master's degree? If you do not see your institution on the list, scroll to the bottom of the list and select 'Other'.

[List of institutions]

[Displayed if selected Question 7.: Other]

- 8. At which institution did you earn your most recent master's degree?
- 9. In which year did you earn your most recent master's degree? [Drop down list of years]



10. In which field did you earn your master's degree? [List of fields]

[ALL SKIP TO SECTION "CURRENT STATUS"]

Academic Background: Highest degree is Doctoral degree - details

[Displayed if selected Question 1: Doctoral degree]

11.	At which institution did you earn your most recent doctoral degree? If you do not see your institution on the
	list, scroll to the bottom of the list and select 'Other'.
	[List of institutions]

[Displaye	ed if selected (Duestion	11.: Other
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12. At which institutio	n did yo	u earn y	our most	recent d	loctoral c	legree?

- 13. In which year did you earn your most recent doctoral degree? [Drop down list of years]
- 14. In which field did you earn your doctoral degree? [List of fields]
- 15. In total, how many postdocs have you completed since earning your doctoral degree?
 - **(**
 - **Ŷ** 1
 - **Ŷ** 2
 - **û** 3
 - 4 or more

3. Current Status

16.	Wh	nat is	your	current	employment	status?	Select a	all that	apply.

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ None of the above [Go to Question 28.]

Current Status: Currently employed full or part time

PROMPT: Now we would like to ask about your current employment situation.

- 17. Which career level best describes your current professional status?
 - Entry level
 - Mid level
 - Senior level
 - Executive level
- 18. In which field are you currently working? Choose up to 2 responses. Note: If you do not see your exact field, select the option(s) most closely related.



[list of computing-related fields]
[If a non-computing field is selected, go to Question 19.]

19	. Wh	nich of the following reasons below best explain why you do not currently work in a computing-related
	pos	sition? Choose up to 3 responses.
		I do not have the required education/training for computing positions
		There is nothing available in my geographic location
		There is nothing available in the field I am interested in
		I am not interested in working in computing
		Jobs in computing are too stressful
		I am experiencing a two-body problem
		I do not see a place for myself in computing
		I have had negative experiences in computing
		I have a strong interest in a different field that is not related to computing
		I did not earn a degree in computing
		I applied for a computing position but did not get it
		I am currently on the job market for a computing job
		Other; please specify:
	_	
20	. Ho	w long have you been working in [insert response from Q18.]?
		Less than 1 year
		1 – 5 years
		More than 5 years but less than 10 years
		More than 10 years but less than 20 years
		20 or more years
	v	
21	. Wh	nat is your specialty area? Select all that apply.
		No specialty
		Artificial Intelligence
		Computer-Supported Cooperative Work
		Computing Education
		Data Mining
		Databases/Information Retrieval
		Distributed Systems
		Embedded Systems
		Formal Methods/Verification
		Graphics/Visualization
		Hardware/Architecture
		Human-Computer Interaction
		High-Performance Computing
		Informatics: Biomedical or Other Science
		Information Science
		Information Systems
		Machine Learning
		Natural Language Processing
		Networks
		Operating Systems
		Operations Research
		Programming Languages/Compilers
	$\overline{\Box}$	Rohotics/Vision



	 □ Scientific/Numerical Computing □ Security/Information Assurance □ Social Computing/Social Informatics □ Software Engineering □ Theory and Algorithms □ Other; please specify:
22	 In which setting do you currently work? Academia, PhD granting institution [Answer questions 2324.] Academia, non-PhD granting institution [Answer questions 2324.] Academia, K-12 [Go to Question 25.] Industry [Go to Question 25.] Government lab [Go to Question 25.] Other [Go to Question 25.]
23	Are you tenured or tenure track? Yes, I am tenured Yes, I am tenure-track No, I am neither tenured nor tenure-track
24	 What is your current position? If you do not see your exact title, please select the one that best fits your position. ♦ Technical staff ♦ Administrative staff ♦ Postdoc ♦ Lecturer/Instructor/Adjunct faculty ♦ Assistant Professor ♦ Associate Professor ♦ Full Professor ♦ Professor of the Practice ♦ Emeritus ♦ Administration/Leadership level position ♦ Other
25	i. What is your job title?
26	i. What is the primary focus of your current position? Choose up to 3 responses that best describe the focus of your position. Research Teaching Administration Administrative Advising Technical Analytical Management Skilled labor





More than 4

Structure of REU Projects

DDOMDT: In this section, we would like to ask you questions about the DELL projects y

	recurrently run.
ins � � � �	proximately how many years of experience do you have running REU programs, whether at your current titution or a previous institution? Less than 1 year 1 – 5 years More than 5 years but less than 10 years More than 10 years but less than 20 years 20 or more years
30. Ар	proximately how many REUs have you worked on as a PI, co-PI, or in a supervisory/mentoring role? O 1-5 O 6-10 O 11-20 O 21 or more
	nich of the following apply to the REU projects that you ran in the past (or are currently running)? CISE REU Site CISE REU Supplement (summer) CISE REU Supplement (academic year) Other summer REU Other academic year REU
32. Fo is a \$ \$ \$	if < 1 year] r your REU programs, how often do you have a co-mentor? This is typically another faculty member who also helping to lead the project in some way. Never Sometimes About half the time Most of the time Always
�	proximately how many students do you typically have in one of your REU projects? 1 2-5 6-10 11-20 More than 20
34. Ho	ow many REU projects do you typically run at one time? 1 2



\$	w important is it to you to select REU students who could potentially be your future graduate students? Not at all important Slightly important Moderately important Very important Extremely important
PROM led.	PT: For the upcoming questions, please think about a typical CISE REU Site or Supplement you have
	Graduate students and/or lab assistants help mentor students Summer REU students can extend their research into the academic year Academic year REU students can extend their research into the summer Your department provides resources to support the REU (e.g., equipment, lab space, etc.) Multiple faculty members collaborate on the project REU students collaborate with other REU students on the project None of the above
up	tich of the following reasons were most important to helping you decide the focus of your REU? Choose to 3 answers: The work was on a current research trend that would appeal to students There was no one else to do the work, and the project would have been dormant without the REU The work was closely related to my graduate student's research topic The work was closely related to my own research interests The work was closely related to REU students' interests and abilities The work was critical to the success of the larger project it was part of I don't remember None of the above
\$ \$ \$ \$	your typical REU project, who is the person that REU students work with the most? The PI and/or co-PI Another faculty advisor, not the PI Postdoc(s) Graduate student(s) and/or lab assistants Someone else
39. On	average, how often were you able to work directly with your REU students?

Once every 2 weeks
A few times across the summer period
I never worked directly with the REU students

Every day

Once a week

A few times a week

40. Thinking about how often you were able to work directly with your REU students, how does that compare to



- Somewhat less than I expected
- As much as I expected
- Somewhat more than I expectedMuch more than I expected

Who is the person who ran, or runs, the mentoring component for your REU projects? Select all that apply. The PI and/or co-PI Another faculty advisor, not the PI Postdoc(s) Graduate student(s) and/or lab assistants
☐ Someone else What other structural/operational components of your REU projects do you include that we haven't already asked about?



5. Perceived impact of REU for participants

PROMPT: For the upcoming questions, please think about a typical CISE REU Site or Supplement you have led.

- 43. Approximately how much time was dedicated to helping your REU students build the following skills: (None at all; A little; A moderate amount; Quite a bit; A great deal; Don't remember)
 - Programming skills
 - Other technical skills
 - Research methods skills
 - Scientific writing skills
 - Career development skills
 - Communication skills
 - Problem-solving skills
- 44. To what extent does your REU project give students the opportunity to do the following: (None at all; A little; A moderate amount; Quite a bit; A great deal; Don't remember)
 - Define a research problem
 - Generate hypotheses
 - Use scientific methods to test a hypothesis
 - Collaborate with colleagues
 - Collect data or conducting experiments
 - Analyze data with statistics or other tools
 - Work on open-ended theoretical/mathematical problems
 - Decide what to do next (e.g., follow-up studies)

	Served as a research advisor after the REU ended Served as a mentor after the REU ended Co-wrote a research paper, which was later published Helped them find opportunities to present their work at showcases or conferences Provided one-on-one support for their graduate school or job applications Written a recommendation letter for their graduate school applications Served as a reference for their job applications Became their graduate school advisor None of the above
46.	Applying to grad school (e.g., application process, preparing materials, etc.) Life as a graduate student Life in a research career Work/life balance The REU student's future career interests Overcoming personal and professional obstacles Issues of underrepresentation in computing My REU did not include a mentoring component



		None of the above
47.	\$ \$ \$ \$	what extent do you think the REU helped your student get an accurate preview of graduate school ? Not at all A little A moderate amount Quite a bit Very much
48.	COI ••• ••• •••	what extent do you think the REU helped your student get an accurate preview of a research career in mputing? Not at all A little A moderate amount Quite a bit Very much
49.	* * * *	what extent do you think the REU helped your student get an accurate preview of academia ? Not at all A little A moderate amount Quite a bit Very much
50.		ease take a moment to think about your REU students' experiences working in your project. How would u describe the experience your REU provides to students?



6. Motivations for and perceived impact of REU for personal career development

Now, we would like to ask about what motivated your decision to run an REU and its impact on your career development.

- 51. To what extent did the following contribute to your decision to run an REU project? [Not at all; a little; a moderate amount; Quite a bit, a great deal; I don't remember]
 - I wanted to help develop a new generation of researchers in my field
 - I wanted to give students impactful research experience
 - I needed to make progress with my research projects
 - I wanted the additional funding
 - I wanted to encourage students to purse graduate school
 - I wanted to find potential graduate students for my department
 - I wanted to experiment with different research techniques
 - I believed it would be helpful for my own career
 - I wanted to develop my mentorship skills

52.	. In v	what ways has running REU projects impacted your career? Select all that apply.
		I was able to use this as part of my tenure application
		I was able to add this to my CV
		It opened new collaborations with faculty at my institution
		It opened new collaborations with faculty at other institutions
		It gave me the resources to expand my lab
		It taught me how to be a better mentor for students' research
		It taught me how to be a better mentor for students' career development
		It led to future research with some REU students
		It led to more publications
		I was able to patent some of my work
		I don't remember
		None of the above
53.	. Ho	w would you rate your proficiency to mentor students on their research ?
	•	Highly deficient

- Deficient
- Average
- Proficient
- Highly proficient
- 54. How would you rate your proficiency to mentor students on their academic development?
 - Highly deficient
 - Deficient
 - Average
 - Proficient
 - Highly proficient
- 55. How would you rate your proficiency to mentor students on their career development?
 - Highly deficient
 - Deficient



- Average
- Proficient
- Highly proficient

56. What other ways has running an REU program impacted your career or skills, either positivel negatively?					

[SKIP if < 1 year]

- 57. Approximately how many of your former REU students are you able to stay in touch with for at least a few years after the REU concludes?
 - None of my students
 - Some of my students
 - About half of my students
 - Most of my students
 - All of my students

[SKIP if < 1 year]

- 58. Approximately how many of your former REU students are you able to recruit for your graduate program?
 - None of my students
 - Some of my students
 - About half of my students
 - Most of my students
 - All of my students
- 59. Which of the following statements do you believe to be true? Please select all that apply.
 - □ REUs serve as opportunities for departments to easily recruit graduate school applicants
 □ Some REUs are better than others at preparing students for research careers
 - Department intentionally have certain REU programs just so they can recruit students for their graduate program
 - ☐ Some REUs are more prestigious than other REUs
 - ☐ None of the above
- 60. To what degree do you think having an REU makes a graduate school applicant more competitive than an applicant without an REU?
 - Not more competitive
 - Somewhat more competitive
 - Absolutely more competitive
 - I don't know
- 61. In your opinion, how effective are REUs in encouraging students into graduate school and research careers?
 - Not at all effective
 - A little effective
 - Moderately effective
 - Very effective
 - Extremely effective



7. Demographics

PROMPT: Thank you for answering all of those questions! We are almost finished. These last questions whelp us better understand our respondents. You may skip any question you do not wish to answer.	/ill
62. 63. 64. 65. 66. 67. 68. 69. 70. 71. What sex were you assigned at birth, on your original birth certificate?	
MaleFemaleRefusedDon't know	
72. Do you currently describe yourself as male, female or transgender? O Male O Female O Transgender O None of these	
 73. Just to confirm, you were assigned { REF _Ref90468763 \r \h 62 REF _Ref90468777 \r \h 63}. Is the correct? Yes No Refused Don't know 	ıt
74. What is your ethnicity? Select all that apply. Not of Hispanic, Latinx, or Spanish origin Mexican, Mexican American, Chicanx Puerto Rican Cuban Another Hispanic, Latinx, or Spanish origin	
75. What is your race? Please select all that apply. African American/African/Black American Indian/Alaska Native Arab/Middle Eastern Caucasian/European/White	



 East Asian (e.g., Chinese, Japanese, Korean) Southeast Asian (e.g., Cambodian, Vietnamese, Hmong, Filipino) South Asian (e.g., Indian, Pakistani, Nepalese, Sri Lankan) Other Asian Native Hawaiian/Pacific Islander
 76. Have you ever served on active duty in the U.S. Armed Forces, Reserves, or National Guard? Never served in the military Only on active duty for training in the Reserves or National Guard Now on active duty On active duty in the past, but not now
 77. What is your citizenship status? U.S. citizen or permanent resident (includes dual-citizenship) Non-U.S. citizen with temporary visa Other non-U.S. citizen
[If Q77. is NOT "U.S. citizen or permanent resident (includes dual-citizenship)"] 78. Of which country are you a citizen? [Drop down list of countries]
79. In which year were you born? [Drop down list of years]
80. Which of the following best describes your sexual orientation? Heterosexual Homosexual Bisexual Asexual Something else I don't know
81. What type of disability do you have? Select all that apply. I do not have a disability Attention deficit Auditory disability Autism spectrum disorder Blind or visually impaired (does not include near/far sightedness) Health-related disability Learning disability Mental health disability Mobility or orthopedic disability Speech or language disorder Something else
82. What is the highest level of education attained by your any of your parent(s)/guardian(s)?

- - Less than high school
 High school graduate or GED
 Some college (no degree earned)



- Associate's degree
- Bachelor's degree
- Master's degree
- Doctoral degree
- I don't know

83. Do any of your parent(s)/guardian(s) currently have, or have held, a career related to the following fields:

- Computer science/Information Technology
- Engineering
- Mathematics
- Any other STEM fields
- Yes
- No.
- I don't know

8. Raffle Opt-in

If you are interested in being entered in a raffle for [TBD], please provide your email address. The email you provide will only be used to contact you if your name is drawn for the prize; it will not be used for any other purpose.

If you are not interested in entering the raffle, please click next.

Raffle email address:	

9. Update Contact Information

Thank you for completing our survey!

We contacted you with this email address: [INSERT EMAIL ADDRESS]. Is this still your primary email address?

If not, please consider updating your email address with us below. If your email address is current, please click next.

Update primary email address:	

10. Follow-up Permission

We would like to follow up with you in the future regarding your career progression. You would receive an online survey similar to this one. If you are interested in completing future surveys, please provide us with your email address so that we can contact you in the future. Your participation will help inform the computing community about how people make decisions regarding computing careers.

For information on how we will protect your privacy, please read our privacy policy. [Privacy policy linked in-text].



We would prefer a primary email address and a secondary email address as a backup.		
Primary email address that you expect to stay active long-term:		
Secondary email address:		
[end survey]		