



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 23-074

Dear Colleague Letter: Computer and Information Science and Engineering Graduate Fellowships (CSGrad4US)

March 30, 2023

Dear Colleagues:

The computer and information science and engineering fields are experiencing booming undergraduate enrollments. Many of these undergraduate degree recipients have outstanding job opportunities in industry and at other organizations, and only a small fraction of these individuals considers pursuing related doctoral degree-granting programs. In order to increase the number of diverse, domestic graduate students in these areas and thereby bolster the U.S. population in the Nation's computer and information science and engineering research and innovation workforce, the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) is continuing to support CISE Graduate Fellowships (CSGrad4US). In particular CSGrad4US is intended for individuals who have some practical experience following their bachelor's degree and are now interested in pursuing a research-based doctoral degree.

The goals of the CSGrad4US Fellowships are to: 1) select, recognize, and financially support early-career individuals with the demonstrated potential to be high-achieving CISE researchers and innovators; and 2) to broaden participation among groups underrepresented in CISE disciplines, including women, Blacks and African Americans, Hispanics and Latinos, American Indians, Alaska Natives, Native Hawaiians, other Pacific Islanders, and persons with disabilities. CSGrad4US Fellowships are a part of an overall strategy by NSF's CISE directorate to develop the national workforce necessary to ensure the Nation's leadership in advancing CISE research and innovation.

As detailed below, the CSGrad4US Fellowship utilizes a two-phased process, comprising (i) part-time mentored preparation, followed by (ii) the fellowship itself, which constitutes three years of support for graduate study that leads to a research-based doctoral degree in a CISE discipline. This DCL invites applications for individuals who intend to apply to doctoral degree-granting programs in CISE disciplines for matriculation in Fall 2024 or Fall 2025.

Individuals selected for CSGrad4US Fellowships who successfully enroll in a doctoral degree-granting program in a CISE discipline no later than Fall 2025 will receive separate guidance about the fellowship funding. The fellowship funding will be provided to the CSGrad4US Fellows' institutions of higher education.

I. DESCRIPTION

A. Overview:

The CSGrad4US Fellowships support graduate study leading to research-based doctoral degrees in CISE disciplines. They support individuals proposing plans for graduate education that takes individual experiences, interests and competencies into consideration. A CSGrad4US Fellowship applicant's plan describes the academic and industrial achievements, attributes, and experiences that illustrate their demonstrated potential for significant research achievements. A CSGrad4US Fellowship applicant must provide a profile of their relevant education and experience and a reference letter that demonstrates this potential.

CSGrad4US Fellowship applicants are advised that, to eventually receive a fellowship, they must pursue graduate study in a doctoral degree-granting program in a CISE discipline at an accredited, non-profit institution of higher education having a campus located in the United States, its territories or possessions, or the Commonwealth of Puerto Rico.

Selection of recipients of the CSGrad4US Fellowship is a two-phased process:

- Phase 1 is a required part-time, mentored preparation program beginning in Fall 2023 and continuing through the graduate school application process. The mentored preparation program will support individuals selected for CSGrad4US Fellowships as they develop their research statements and applications for graduate schools. In particular, individuals selected for CSGrad4US Fellowships will receive guidance from academic faculty who have keen insights on graduate school admissions throughout the application process toward successful admission, school selection, and eventual matriculation into a doctoral degree-granting program. The part-time mentored preparation will be designed to accommodate individuals who are working full-time and may be personalized to each individual as appropriate. While NSF will not provide any funding to the individuals selected for CSGrad4US Fellowships during Phase 1, the individuals will receive the benefits of academic CISE faculty mentors who will follow a structured process to leverage individuals' backgrounds and experiences in preparing their graduate school application materials and preparing themselves for the transition to graduate school.
- Phase 2 constitutes three years of support, in the form of a stipend and cost-of-education allowance to be provided through a grant to an institution of higher education,

for a research-based doctoral program. For selected individuals to receive CSGrad4US Fellowships, they must be enrolled in a doctoral degree-granting program in a CISE discipline by no later than Fall 2025. Further, from the initial enrollment in a doctoral degree-granting program through completion or termination of the CSGrad4US Fellowship, individuals accepting the Phase 2 funded CSGrad4US fellowship award (CSGrad4US Fellows) must be enrolled in an accredited doctoral degree-granting institution of higher education having a campus located in the United States, its territories or possessions, or the Commonwealth of Puerto Rico. During receipt of the fellowship support, the CSGrad4US Fellow's institution is required to exempt the Fellow from paying tuition and fees normally charged to students of similar academic standing, unless such charges are optional or are refundable (i.e., the institution is responsible for tuition and required fees in excess of the cost-of-education allowance).

NSF expects that 70 individuals will be selected. Upon enrollment in a doctoral degree-granting program in a CISE discipline by no later than Fall 2025, these individuals will become CSGrad4US Fellows. Each Phase 2 CSGrad4US Fellowship will be in the amount of \$159,000, for three years of support during a five-year fellowship period. For each of the three years of support, a \$37,000 stipend and \$16,000 cost-of-education allowance will be awarded to the graduate degree-granting institution of higher education for each Fellow who will use the support in a fellowship year. More details about how to receive the fellowship funding will be provided to successful CSGrad4US Fellowship applicants when they confirm that they have been accepted into a doctoral degree-granting program.

This program seeks applications that will result in decisions for the first phase of a CSGrad4US Fellowship in Fall 2023, i.e., a part-time mentored preparation for graduate school enrollment. While this phase does not provide any funding, it assists individuals selected for CSGrad4US Fellowships in enhancing their prospects for doctoral degree-granting program enrollment, a prerequisite to receiving the fellowship funding in Phase 2. CSGrad4US Fellows together with the institutions of higher education hosting them will receive guidance on submitting full proposals to obtain Phase 2 funding.

B. Detailed Eligibility Requirements:

Described in detail below are the eligibility requirements for the CSGrad4US Fellowship: (1) citizenship, (2) degree requirements, and (3) field of study / degree programs for proposed research. CSGrad4US Fellowship applicants are strongly advised to read the entire DCL carefully to ensure that they understand all the requirements. CSGrad4US Fellowship applicants must self-certify that they intend to pursue a research-based doctoral degree in an eligible field of study and that they meet all eligibility criteria.

1. Citizenship

CSGrad4US Fellowship applicants must be United States citizens, United States nationals, or permanent residents of the United States by the application deadline.

The term "national" designates a native resident of a commonwealth or territory of the United States, such as American Samoa. It does not refer to a citizen of another country who has applied for United States citizenship and who has not received U.S. citizenship by the application deadline.

2. Degree Requirements

CSGrad4US Fellowship applicants are eligible to apply as bachelor's degree holders who (i) graduated with a bachelor's degree before December 31, 2022 (ii) have demonstrated [CISE core competency](#); (iii) have not been enrolled in any degree-granting program after January 1, 2023; (iv) have never enrolled in and have no pending application or offer of admission for a doctoral degree-granting program in a CISE discipline; and (v) will be prepared to attend graduate school by Fall 2025.

3. Field of study, degree programs that they plan to attend.

The CISE disciplines are computer science, computer engineering, and information science. CSGrad4US Fellowship applicants must indicate which area(s) within these CISE disciplines they intend to study.

Individuals are not eligible to apply if they propose to enroll in a discipline outside of the CISE disciplines.

Individuals who are enrolled, or will enroll, in a graduate degree program while on a leave of absence from a professional degree program or professional degree-graduate degree program are ineligible for a CSGrad4US Fellowship.

To receive the CSGrad4US Fellowship, individuals must participate in the CSGrad4US Mentoring Program in Fall 2023. For more information about the mentoring program and the CISE Core Competency expected as preparation for CISE doctoral programs, please refer to the Mentoring Program webpage <https://cra.org/cra-wp/cs-grad4us/>.

II. HOW TO APPLY

A. Application Preparation Instructions

CSGrad4US Fellowship applicant applications must be submitted via the NSF Education & Training Application (<https://www.nsfetap.org>).

To use ETAP, please visit <https://etap.nsf.gov>, click on "Create an Account," select "Applicant," and follow the instructions to complete your registration. Once you have

registered your account, visit the CSGrad4US Fellowship application and complete the remaining steps at:

<https://etap.nsf.gov/csgrad4us>

These detailed instructions for completing the application can be found at

<https://www.nsf.gov/cise/CSGrad4US>.

Applications, including reference letters, must be received by 11:59 p.m. Eastern time on June 26, 2023. Applications will not be accepted after the deadline.

All CSGrad4US Fellowship applicants must submit the following information through NSF ETAP:

1. **Application Information:** Provide personal information, including demographic information, and education history. Please note that ETAP serves many different NSF programs and collects the same registration information from all applicants. Some questions in the ETAP registration form are applicable for other programs, but not the CSGrad4US Fellowship (for example, GRE scores or previous research experience).
2. **Personal Statement#1—Relevant Background Experience:** Describe your professional career and accomplishments since your college graduation and why you are interested in pursuing a Ph.D. degree in a CISE discipline at this stage in your professional development (see section B below).
3. **Personal Statement #2—Addressing Underrepresentation in CISE Disciplines:** Describe ways you plan to contribute in the future to addressing the longstanding underrepresentation of various populations — including women, Blacks and African Americans, Hispanics and Latinos, American Indians, Alaska Natives, Native Hawaiians, other Pacific Islanders, and persons with disabilities — in the CISE disciplines (see section B below).
4. **Reference letter:** Reference writers must be invited to provide a reference through ETAP and submit their letter through ETAP by the application deadline (see section C below).
5. **Transcript PDF(s).** In the registration form, CSGrad4US Fellowship applicants must list their baccalaureate institution and must provide a PDF transcript(s) from the institution(s). Any other education institutions attended with a start date prior to the application deadline must also be specified, and corresponding transcripts are required. Transcripts are required for all degree-granting programs listed. Transcripts may be included for all other institutions listed in the Education section of the Application Form. If the CSGrad4US Fellowship applicant started a professional master's degree program in the fall of the application year and the master's institution does not provide unofficial or official transcripts prior to the application deadline, the applicant may submit a class schedule/enrollment verification form in place of a transcript. At least one transcript must

be attached to the applicant's application for the application to be accepted. Applicants should redact personally-identifiable information (date of birth, individual Social Security Numbers, personal financial information, home addresses, home telephone numbers and personal email addresses) from the transcripts before uploading in ETAP where indicated. NSF does not accept encrypted or password-protected transcripts.

6. **Resume.** A two-page resume with work, leadership, service, and research experience as well as education history must be uploaded in PDF format in ETAP where indicated.

Only the information required in the application will be reviewed. No additional items or information will be accepted or reviewed. Do not provide links to web pages within the application. Images, if included, must be within the page limits. Review of the application and reference letter is based solely on the materials received by the application deadline.

Failure to comply fully with the above requirements will result in the application being deemed ineligible.

Applications will not be accepted after the application due date and a reference letter must be received by the application due date or the application will not be considered. CSGrad4US Fellowship applicants are advised to request reference letters and submit applications early to avoid unanticipated delays in submitting them by the deadline dates.

NSF may share application information with one or more third-party organizations retained by NSF under contract, grant, or otherwise, to administer and implement all or portions of this program.

B. Guidance for Personal Statements

The length of the two personal statements must together total no more than five (5) pages. By applying to CSGrad4US, applicants are certifying that the two statements in the application are their own original work. The statements must be written using the following guidelines:

- standard 8.5" x 11" page size;
- Times New Roman font for all text, Cambria Math font for equations, Symbol font for non-alphabetic characters (it is recommended that equations and symbols be inserted as images), no smaller than 11-point, except text that is part of an image;
- 1" margins on all sides, no text within the 1" margins (no header, footer, name, or page number); and
- No less than single-spacing (approximately 6 lines per inch). Do not use line spacing options such as "exactly 11 point," that are less than single spaced.

Each personal statement must be uploaded to the ETAP system as a separate PDF file where indicated. Compliance with these guidelines will be checked. Applications that are not

compliant with these format requirements will be returned without review.

C. Guidance for Reference Letter

CSGrad4US Fellowship applicants are required to have exactly one Letter of Reference, to be submitted through ETAP by the reference letter writer. While only one letter is required, CSGrad4US Fellowship applicants may request references from up to three reference letter writers in the system, in the event that one or two fail to provide letters.

CSGrad4US Fellowship applicants must identify only one reference letter to include with their application prior to the application deadline.

Reference letter writers will be asked to include their positions and titles in the reference letters.

The reference letter must be submitted via NSF ETAP. The reference letter is limited to a two- (2-) page PDF.

Applicant should include the following Guidance to Reference Letter Writers when requesting references in ETAP:

“Dear Reference:

I am requesting a reference letter in support of my application for an NSF Computer and Information Science and Engineering (CISE) Graduate Fellowship. If you are willing to provide a reference on my behalf, please submit your reference prior to the application deadline of June 26, 2023. Reference letter requirements for this Fellowship include:

- Institutional or professional letterhead, if available;
- Two- (2-) page limit;
- 12-point Times New Roman in the body of the letter;
- Name and title of reference writer;
- Department and institution or organization; and
- The reference letter should include details explaining the nature of the relationship to the CSGrad4US Fellowship applicant (including research or industry advisor role), comments on the applicant’s potential for contributing to a United States science and engineering workforce, statements about the applicant’s academic potential and prior research and work experiences, and any other information that would aid review panels in evaluating the applicant’s application.

Thank you!”

D. Withdrawal of an Application

To withdraw a submitted application, the CSGrad4US Fellowship applicants must contact the NSF ETAP Helpdesk at help@nsfetap.org.

III. REVIEW AND SELECTION PROCESS

Applications submitted to this program will be reviewed by disciplinary and interdisciplinary scientists and engineers and other professional graduate education experts. Care will be taken to ensure that reviewers have no conflicts of interest with the applicants.

Each application will be reviewed independently in accordance with the NSF Merit Review Criteria using all available information in the completed application. In considering applications, reviewers are instructed to address the two Merit Review Criteria as approved by the National Science Board, Intellectual Merit and Broader Impacts. More information about the Merit Review Criteria is provided in Chapter III of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG).

From these recommendations, CSGrad4US Fellowship applicants will be selected for Phase 1 CSGrad4US Fellowships, in line with NSF's mission and the goals of CSGrad4US.

IV. CONTACTS

General inquiries regarding CSGrad4US Fellowships should be made to:

- NSF CSGrad4US Fellowships, telephone: (703) 292-8950, email: csgrad4us@nsf.gov.

Sincerely,

Margaret Martonosi
Assistant Director,
Directorate for Computer and Information Science and Engineering (CISE)
NSF