



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 21-044

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

The CSGrad4US application deadline has been extended until Wednesday, May 19, 2021 at 5 p.m. submitter's local time. The reference letter deadline has also been extended until Wednesday, June 9, 2021 at 5 p.m. Eastern Time.

February 3, 2021

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) announces its intention to support CISE Graduate Fellowships (CSGrad4US) as a pilot effort. 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, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, Native 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 which will result in decisions for the first phase in time for selected individuals to apply to doctoral degree-granting programs in CISE disciplines for matriculation in Fall 2022 or Fall 2023.

Individuals selected for CSGrad4US Fellowships who successfully enroll in a doctoral degree-granting program in a CISE discipline by no later than Fall 2023 will separately be provided guidance about the fellowship funding. The fellowship funding will be provided to 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 take 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 part-time, mentored preparation program beginning in Fall 2021 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 2023. 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 to select 70 individuals pursuant to this DCL. Upon enrollment in a doctoral degree-granting program in a CISE discipline by no later than Fall 2023, these individuals will become CSGrad4US Fellows. Each Phase 2 CSGrad4US Fellowship will be in the amount of \$138,000, for three years of support during a five-year fellowship period. For each of the three years of support, NSF will provide a \$34,000 stipend and \$12,000 cost-of-education allowance 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 notify NSF that they have been accepted into a doctoral degree-granting program.

This DCL seeks applications that will result in decisions for the first phase of a CSGrad4US Fellowship, 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 receive the fellowship funding in Phase 2. NSF will provide CSGrad4US Fellows together with the institutions of higher education hosting them with 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 in a CISE discipline between July 1, 2016, and June 31, 2019; (ii) have never enrolled in a master's or doctoral degree-granting program, other than a professional master's degree program, in a CISE discipline; and (iii) will be prepared to attend graduate school by Fall 2023.

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 CISE.

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.

II. HOW TO APPLY

A. Application Preparation Instructions

Each CSGrad4US Fellowship applicant must first register on [Research.gov](https://www.research.gov) to obtain a nine-digit NSF ID. Subsequently, CSGrad4US Fellowship applicant applications must be submitted via email to csggrad4us-app@nsf.gov. Detailed instructions for obtaining a NSF ID and completing the application can be found at <https://www.nsf.gov/cise/CSGrad4US>.

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.

Except for the Reference Letters described below, applications must be received by 5:00 p.m. local time on April 13, 2021, as determined by the CSGrad4US Fellowship applicant's mailing address provided in the application. Applications received after the deadline will be deemed ineligible.

As noted below, Reference Letters must be separately emailed to csgrad4us-ref@nsf.gov by 5:00 p.m. Eastern Time on May 4, 2021.

This DCL seeks applications that will result in decisions for the first phase of a CSGrad4US Fellowship, 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 receive the fellowship funding in Phase 2. NSF will provide CSGrad4US Fellows together with the institutions of higher education hosting them with guidance on submitting full proposals to obtain Phase 2 funding.

All CSGrad4US Fellowship applicants must submit the following documents as attachments **(a total of four attachments only, each as a PDF)** to a single email to csgrad4us-app@nsf.gov with the applicant's full name and NSF ID as the subject of the message (the message body may be left blank):

1. **Application Form:** This form is a fillable PDF named **csgrad4us-form-[your 9-digit NSF ID].pdf** that can be found at <https://www.nsf.gov/cise/CSGrad4US>. The fillable PDF includes personal information, including professional experience, education history, and contact information for at least one letter of reference writer.
2. **Two (2) Personal Statements:** The following two personal statements can together be no more than five (5) pages and should be in a single PDF named **statements-[your 9-digit NSF ID].pdf**.
 - a. **Personal Statement, including 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.
 - b. **Addressing Underrepresentation in CISE Disciplines:** Describe ways you plan to contribute in the future to addressing the longstanding underrepresentation of various populations — including women, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, Native Pacific Islanders, and persons with disabilities — in the CISE disciplines.
3. **Transcript PDF(s).** In the application form template, 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 Template. 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. NSF does not accept encrypted or password-protected transcripts. Should an applicant need to submit multiple transcripts, these should be packaged together in a single PDF named **transcript-[your 9-digit NSF ID].pdf**.

4. **Resume.** A two-page resume with work, leadership, service, and research experience as well as education history must be included as an attachment named **resume-[your 9-digit NSF ID].pdf**.

Only the information required in the application will be reviewed. No additional items or information will be accepted or reviewed. For the attachments, please use the file names specified above. 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 and reference letter deadlines. All materials, except the reference letter, must be submitted in one email.

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

Applications that are incomplete due to missing the required transcripts by the application due date and/or reference letter by the reference letter deadline will be deemed ineligible. CSGrad4US Fellowship applicants are advised to submit applications early to avoid unanticipated delays on the deadline dates.

B. Guidance for Personal Statements

The two 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.

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 separately by the reference letter writer. While only one letter is required, CSGrad4US Fellowship applicants may specify the names of three reference letter writers and contact those individuals, in the event that one or two fail to provide letters.

CSGrad4US Fellowship applicants must list at least one and up to three names, organizational affiliations, and e-mail addresses of non-related individuals who will separately submit Letters of Reference on their behalf. The names should be prioritized from 1 to 3 (1 being the highest priority). In the event of a missing letter, the letters from the optional second and/or third references will be used, in the ranked order. Only one letter will be reviewed for each eligible application. This ranking is for application management purposes only and is not disclosed to reference letter writers and reviewers.

Reference letter writers must include their positions and titles in the reference letters.

Your application must have at least one reference letter received at NSF by the reference letter deadline of 5 p.m. Eastern Time on May 4, 2021. The reference letter must be sent to csggrad4us-ref@nsf.gov and must include your full name and NSF ID in the subject line. The reference letter is limited to a two- (2-) page PDF.

Guidance to Reference Letter Writers:

Reference letter requirements 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.

Reference letters must be sent to csgrad4us-ref@nsf.gov and must include the CSGrad4US Fellowship applicant's full name and NSF ID in the subject line.

At least one reference letter must be received at NSF by the reference letter deadline of 5 p.m. Eastern Time on May 4, 2021, for the application to be considered. If at least one reference letter is not received by the deadline of 5 p.m. Eastern Time on May 4, 2021, then the application will be returned without review.

D. Withdrawal of an Application

To withdraw a submitted application, the CSGrad4US Fellowship applicants must send a request to withdraw their application with the subject "Withdraw" to to csgrad4us-app@nsf.gov.

III. REVIEW AND SELECTION PROCESS

Applications submitted in response to this DCL will be reviewed by disciplinary and interdisciplinary scientists and engineers and other professional graduate education experts. Reviewers will be selected by the cognizant NSF program directors for CSGrad4US Fellowships who are charged with oversight of the review process. Care will be taken to ensure that reviewers have no conflicts of interest with the applicants.

Applications will be reviewed in broad areas of the CISE disciplines based on the areas within these disciplines that CSGrad4US Fellowship applicants specify that they intend to study.

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).

Reviewers will be instructed to review CSGrad4US Fellowship applications holistically, applying the Merit Review Criteria above and noting CSGrad4US's emphasis on potential for significant research achievements in a CISE discipline. In particular, reviewers will be instructed to comment about the application form, two personal statements, transcript(s), resume, and reference letter in the context of the Merit Review criteria, along with the applicant's demonstrated potential for significant research achievements in a CISE discipline.

From these recommendations, NSF will select CSGrad4US Fellowship applicants 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: csggrad4us@nsf.gov.

Sincerely,

Margaret Martonosi
Assistant Director, CISE
NSF