

Chan Zuckerberg Initiative

REQUEST FOR APPLICATIONS

Essential Open Source Software for Science (Cycle 3)

The Chan Zuckerberg Initiative invites applications in support of open source software projects that are essential to biomedical research. The goal of the program is to support software maintenance, growth, development, and community engagement for these critical tools.

OPPORTUNITY

Overview

Open source software is critical to modern scientific research, advancing biology and medicine while providing reproducibility and transparency. Hundreds of software packages, libraries, and applications have become essential tools for research—so much so that many researchers could not continue their work without them. Despite its importance, even the most widely-used research software often lacks dedicated funding for maintenance, growth, development, and community engagement. Also, those who work on such software often lack credit and recognition.

In a new effort to support open source software for science, the Chan Zuckerberg Initiative (CZI) seeks applications for software projects that are essential to biomedical research, have already demonstrated impact, and can show potential for continued improvement. Grants will be for a one-year period.

With this program, we aim to provide software projects with resources to support their tools and the communities behind them. Whether it's hiring an additional developer, improving documentation, addressing usability, improving compatibility, onboarding contributors, or convening a community, we hope our support can help make the computational foundations of biological research more usable and robust.

Scope

CZI currently supports several areas of basic science and technology with the goal of making it possible to cure, prevent, or manage all diseases by the end of this century. This program aims to support software tools that are essential to this mission. Applications for two broad categories of open source software projects will be considered in scope:

- **Domain-specific software** for analyzing, visualizing, and otherwise working with the specific data types that arise in biomedical science (e.g., genomic sequences, microscopy images, molecular structures). Software will be considered out of scope if it primarily serves domains outside biomedical science (e.g., physics, astronomy, earth sciences). While we appreciate that other communities may want to explore new extensions of their software to the life sciences, such applications are unlikely to be selected.
- **Foundational tools and infrastructure** that enable a wide variety of downstream software across several domains of science and computational research (e.g., numerical computation, data structures, workflows, reproducibility). While foundational tools will be considered in scope for this program, they must have demonstrated impact on some area(s) of biomedical research.

Proposals can request funding for multiple related software projects ([example here](#)).

For examples of open source projects we've funded, we encourage you to check the list of [proposals awarded in the previous cycles](#) and our [blog posts](#).

Examples of projects that are **less** likely to be successful:

- A project in its earlier stages that is not used extensively or known beyond the creator(s);
- A project that is focused on improving or supporting a database or knowledge base that has few community contributions or low adoption in the biomedical community;
- A project that is widely successful and adopted but has little or no applications to biomedicine;
- A proposal for a research project to mine, publish, or analyze research results rather than a project that will support the biomedical research process itself.

Applications can request funding between \$50k and \$250k total costs (inclusive of up to 15% for indirect/overhead costs). Budgets will be evaluated for appropriateness relative to the scope of work proposed. Acceptable use of funds includes, but is not limited to:

- Salary support for staff (full-time, part-time, or contract): developers, contributors, technical writers, community managers, product managers, project managers, user experience researchers, community educators, or other roles that directly support the software project;
- Hackathons, sprints, outreach, or other forms of community engagement and support for community participation;
- Operational needs such as cloud computing, storage, networking, or continuous integration services; and
- Support for work that bridges software projects or ecosystems, including better coordination across software projects that are similar, dependent on one another, or frequently used together.

CZI staff will further support awarded proposals by convening grantee meetings and helping connect open source software developers to scientists, including other CZI-funded grantees and members of the broader scientific community.

ELIGIBILITY

- We welcome applications from any country, provided the proposed work is compliant with the US Treasury Department's Office of Foreign Asset Control (OFAC) program. For additional information regarding OFAC sanctions, please refer to the [US Treasury Department's resources](#).
- Applications may be submitted by non-profit and for-profit organizations, public and private institutions, such as colleges, universities, hospitals, laboratories, units of state and local government, companies, and eligible agencies of the federal government. As part of the application process, for-profit organizations may need to provide additional information on the charitable purposes of the proposal. Grants are not permitted to individuals; only to organizations. Open source software projects operating independently must be affiliated with an organization, as described below.
- If an application does not come from an organization eligible to receive and distribute funds (e.g., an academic institution), it may designate a fiscal sponsor (e.g., [NumFOCUS](#), [Code for Science & Society](#), or others). We encourage proposals that require fiscal sponsorship to contact the appropriate organizations early in the application process. If your application requires a fiscal sponsor and you are unable to secure one by the application deadline, you may still apply, but your application should explain the financial situation of the project and how you are planning to receive and use the funds if successfully awarded. We will prioritize applications already able to receive and use funds at the time of application.
- We will consider and potentially fund multiple applications from the same organization, multiple applications related to the same open source software project(s), and multiple applications that include the same staff and/or software project contributors. However, the proposed work in such applications must be distinct.
- We encourage proposals supporting multiple open source software projects. In the case of applications for work spanning multiple software projects, one individual must complete the application and a single organization or fiscal sponsor must coordinate the dispersal of funds to the members of the collaboration. Note that foreign institutions may not issue subcontracts to US institutions, so please be mindful when selecting the applicant organization.
- We encourage proposals that are currently funded from previous cycles of the EOSS RFA to submit an application to continue or build on the previously funded work.
- We [believe](#) that the strongest teams incorporate a wide range of voices. Those underrepresented in science and technology are strongly encouraged to apply.
- Facebook employees, including employees of any subsidiary Facebook entities, are not permitted to apply for this grant.
- CZI reserves the sole right to decide if an applicant and applicant organization meet the eligibility requirements.

For questions about eligibility, please contact us in advance of the application deadline at sciencegrants@chanzuckerberg.com. Deadline extensions will not be granted.

APPLICATION REQUIREMENTS

Key dates

We invite applications for consideration for funding during three distinct cycles:

Cycle	Portal opening date	Application due date	Notification of decisions	Earliest start date of grant
1 NOW CLOSED	June 18, 2019	August 1, 2019	Late October 2019	December 1, 2019
2 NOW CLOSED	December 16, 2019	February 4, 2020	May 2020	July 1, 2020
3	June 16, 2020 at 9 am Pacific Time	August 4, 2020 by 5 pm Pacific Time	November 2020	January 1, 2021

In addition, representatives from each grantee project will be expected to join grantees from the prior two cycles of this program for a 2-3 day convening meeting in early November 2020. We will be holding this as a virtual event and will work to best accommodate the various time zones of grantees. We ask that you hold the **week of November 2, 2020** for this event.

Grant duration

Grants will be awarded for a **one-year duration**. The actual start date may vary based on specific needs (timing of hiring, etc.) and will be agreed upon after the grant is awarded. No-cost extensions will be considered.

Application specifics

All applications must be completed and submitted through the Chan Zuckerberg Initiative's [online grants management portal](#). We recommend that you familiarize yourself with this portal well in advance of the submission deadlines. Detailed application instructions, including required elements of the application, are available on the [Chan Zuckerberg Initiative website](#), as well as in the [grants management portal](#).

SELECTION PROCESS

The Chan Zuckerberg Initiative's [core values](#) center around people, technology, collaboration, and open science. We adhere to those values in both proposal selection and evaluation of progress.

Applications will be evaluated for their expected impact, the quality of the open source software project(s) involved, the feasibility of the proposal, and their diversity, equity, and inclusion statement—each of which will be assessed through quantitative and qualitative factors. Relevant materials will be provided by the applicants and obtained by CZI from publicly available sources where possible (e.g., GitHub or other public code repositories). Quantitative metrics on software projects will be optional in the application form. Independent expert review will be solicited, and final decisions will be made by CZI staff in consultation with our expert advisors.

Impact will assess the importance of the open source software project(s) involved in the proposal to science and the open source ecosystem, in alignment with our mission to support the science and technology that will make it possible to cure, prevent, or manage all diseases by the end of the century. Reviewers will evaluate:

- Demonstrated scientific impact of the software project,
- The value to the software project provided by the proposed scope of work,
- The role of the software project in the scientific open source ecosystem, and
- Alignment of the software project to areas currently prioritized by CZI Science in accordance with our mission (e.g. imaging, cell biology, genomics).

Alongside qualitative materials, expert evaluation **may** utilize metrics such as:

- Number of users and recent growth,
- Adoption within relevant communities,
- Number of citations or mentions of the software project in scientific literature,
- Number of potential contributors and diversity of the organizations they represent, and
- Number of past contributions to related software projects in the relevant software stack (pushing changes upstream to dependencies, receiving changes from other nearby software projects).

Quality will assess the maturity of the software project(s), its compliance with best practices in open source development, and the existence of a healthy and diverse contributor community. It will again be assessed qualitatively and quantitatively. Reviewers will evaluate:

- Composition and leadership of team,
- Governance structure of the software project,
- Software project communications and community engagement,
- Existence, clarity, and recency of software project roadmap,
- Clarity of process for external contributions,
- Evidence of external contributions from outside of the core developer team (in the form of code, bugs/issue reports, documentation, etc.),
- Availability of tutorials and examples, and
- Quality and comprehensiveness of documentation.

Alongside qualitative materials, evaluation **may** leverage metrics such as:

- Frequency and growth trajectory of commits over time,
- Size and make-up of current developer team,
- Frequency of external contributions,
- Number of open issues, and rate of issues both opened and closed, and
- Time between opening and closing of pull requests.

Feasibility will assess the plan of work described in the proposal and whether it can be accomplished given the requested budget and key personnel involved. Reviewers will evaluate the following based on qualitative materials:

- Specificity and clarity of plan of work to be accomplished,
- Proposed use of funds (relative to plan of work),
- Likelihood of the work being accomplished,
- Plan for tracking and validating progress against goals,
- Degree of unmet need given existing resources, and
- Future plans for sustaining or maintaining the work funded by the grant.

In addition to the above, we are asking all applicants to include in their proposal a **Diversity, Equity, and Inclusion (DEI) statement**, describing (a) any efforts the software project(s) named in this proposal have undertaken to increase diversity, equity, and inclusion with respect to their contributors and audience; and (b) the results of such efforts, if applicable. This statement will be reviewed alongside the above criteria. Please see [examples](#) of DEI statements from successful second cycle applications.

There is no expectation of any specific number of awards for this RFA program, however this grant program operates within a budget which will inform the overall number of awards that are recommended for funding. The Chan Zuckerberg Initiative reserves the sole right to not recommend the funding of any applications. CZI does not provide individual feedback on decisions for unfunded proposals.

Reporting & Progress

Final reports, including a summary of the project progress that will be made publicly available, will be required from successful grantees to ensure that progress is on track toward the deliverables described in the proposal. Measures of progress will also include additional indicators on the growth and uptake of the software project, as obtained from code repositories, issue trackers, package distribution systems, community forums, mailing lists, etc.

POLICIES

- Funds from this award are intended to support specified grant activities. Grants are made to organizations on behalf of the named award recipients, and reasonable flexibility on how these funds are utilized is allowed, provided that the funds are used to support activities related to the proposal. Funded grantees will be asked to provide summary budgets at the time of award and during annual reporting.
- For awarded proposals, financial statements and progress reports will be due at the conclusion of the grant. Specific deliverable requirements will be outlined in the award notification. Key personnel of funded proposals are expected to participate in regular grantee meetings, including annual meetings which may be in person or online. Travel

support for these meetings will be provided by CZI separately from the requested grant funds.

- International grantees must use all grant funds exclusively for activities conducted outside the United States of America. Travel expenses to the United States (including round-trip tickets) should not be covered from the requested grant funds.
- Grantees may obtain funds for the proposed work from other funding sources, provided that there is no conflict with meeting the terms of the CZI award.
- **Ethical conduct:** CZI advocates the highest ethical standards for the conduct of research and for the professional and personal conduct of grantees. Grantee organizations must adopt appropriate procedures for examination of cases of scientific and personal misconduct, including harassment.
- **Data, publication, and dissemination policies:** To accelerate scientific discovery and collaboration, CZI supports a consent, sharing, and publication policy for open and rapid dissemination of proposal results, including methods, data and reagents, and a policy for software development that maximizes accessibility, reuse, and shared development. Exceptions will be considered where there are situations that make this impossible or counterproductive.
 - **Software code:** Any software code developed by CZI grantees through the proposal should generally be made publicly available on GitHub (or a similar public service). All newly developed code must be released under a permissive open source license (MIT, BSD 2-Clause, BSD 3-Clause, or Apache v2.0). All related pre-existing and derivative code should be licensed under the most permissive license possible, given the licensing terms of the pre-existing code. All analysis packages must be released through the appropriate language-specific package manager (e.g., PyPi for Python, Bioconductor and CRAN for R) with documentation, example data, and interactive demos (e.g., Jupyter notebooks), and the use of Docker or similar container technologies to ensure portability and reproducibility. Software code supported by CZI should be archived for [long-term digital preservation](#) and [citability](#), when applicable.
 - **Data sharing:** CZI is committed to developing and using platforms that disseminate data openly and freely while respecting applicable laws and privacy rights of individuals. Any datasets either curated or generated through the proposal should be made publicly available and easily accessible through an appropriate [data repository](#), when applicable, under an [Open Definition conformant license](#), preferably CC0. This includes metadata, documentation, and intended use cases, as appropriate.
 - **Publications:** To encourage rapid dissemination of results, any publications related to this funded work must be submitted to a preprint server (such as bioRxiv, arXiv, or any appropriate preprint repository), at or before the first submission to a journal. CZI requests that scientific publications, preprints, and presentations that result from this award acknowledge support from this funding.
 - **Intellectual property rights:** CZI does not retain any rights, other than a use right, to data, published results, or any other intellectual property that results from the work funded by these grants. CZI supports and promotes policies that enable results

and technologies to have the broadest reach and impact. To this end, all newly developed software should be made available through permissive open source licenses. Other technology and intellectual property rights (such as patents) should be made freely available for all academic and non-commercial use and where commercialized, it should generally be subject to non-exclusive commercial licenses that enable broad availability and dissemination.

- Indirect costs cannot exceed 15% of direct costs and must be included within the annual budget total. Indirect costs may not be assessed on capital equipment or subcontracts, but subcontractors may include up to 15% indirect costs of their direct costs.
- Applications selected through this process will either be funded by the Chan Zuckerberg Initiative Foundation or recommended for funding through the Chan Zuckerberg Initiative Donor-Advised Fund (DAF) at the Silicon Valley Community Foundation (SVCF).

CONFIDENTIALITY

All submitted applications will be kept confidential, except as necessary for our evaluation or to comply with any applicable laws. Successfully funded proposals may be made publicly available and/or shared with other grantees or collaborators. Unfunded proposals will remain confidential; however, information from unfunded projects, including software project metrics and types of organizations that applied for funding, may be made publicly available in aggregate form. Application materials will not be returned to applicants.

CONTACT

For administrative and programmatic inquiries, or other questions pertaining to this Request for Applications, please contact sciencegrants@chanzuckerberg.com.

IMPORTANT DOCUMENTS

[Application Instructions](#)

[Institutional Approval Form](#)

Chan Zuckerberg Initiative

APPLICATION INSTRUCTIONS Essential Open Source Software for Science (Cycle 3)

Some helpful information as you get started:

- This document contains:
 - [General guidance on using the portal](#)
 - [How to submit an application](#)
 - [Application details specific to this EOSS RFA](#)

- Please review the [Request for Applications](#).

- The Chan Zuckerberg Initiative uses SurveyMonkey Apply (SMAppl) as its grants management portal. All applications must be submitted through this portal (<https://apply.chanzuckerberg.com>). SMAppl is configured to work best using the Google Chrome browser. It is recommended that you familiarize yourself with this portal well in advance of any deadlines. Deadline extensions will not be granted.

- **Important Dates:**

Cycle	Portal opening date	Application due date	Notification of decisions	Earliest start date of grant
1 NOW CLOSED	June 18, 2019	August 1, 2019	Late October 2019	December 1, 2019
2 NOW CLOSED	December 16, 2019	February 4, 2020	May 1, 2020	July 1, 2020
3	June 16, 2020 at 9 am Pacific Time	August 4, 2020 by 5 pm Pacific Time	November 2020	January 1, 2021

- **Application specifics:**

- **Award Period:** Proposals should be one year in duration. Actual start date may vary.
- **Budget:** Applications can request funding between \$50k and \$250k total costs (inclusive of up to 15% for indirect/overhead costs). Budgets will be evaluated for appropriateness relative to the scope of work proposed. Indirect costs cannot exceed 15% of direct costs.

GETTING STARTED

Account setup: The applicant (i.e., the person completing the application on behalf of the applicant organization) must first set up an account in the CZI online grants portal at <https://apply.chanzuckerberg.com/>.

To set up an account:

1. Go to <https://apply.chanzuckerberg.com/>.
2. Click the green Register button in the upper right corner.
3. Complete the requested fields and then click the green Create Account button.
4. Click the green Continue button to proceed to the site.

Please note you will need to verify your account through the auto-email that you receive after registering. You will not be able to submit an application until your account is verified.

Personal Data: Where we ask for personal data of individuals in grant applications, please only submit personal data that you have a right to provide. We will use and store any personal data collected through the application process for grant-related purposes (e.g., administering the grant, decision-making related to grants, and analysis of our grant practices), subject to the limitation in Applicant Details Part 2. Chan Zuckerberg Initiative will be the “data controller” for any such personal information, and the data may be stored on servers outside of your home country, including within the United States. If you have any questions or concerns regarding our privacy practices or collection or use of personal data, you can contact us at privacy@chanzuckerberg.com.

Navigating the portal: Once you have set up an account, you can log in to the grants portal at <https://apply.chanzuckerberg.com/>. Using the links in the upper right corner, you can access available programs (which includes RFAs for all CZI areas, not just science) and any applications you have in preparation or previously submitted. Use the information (“i”) link to get help with the portal. To access your account information, click on your name in the upper right corner. Your application will pre-populate with the name and email listed in your account information; if you need to edit it, click on your name in the upper right corner to make any necessary changes.

Forgotten username or password: If you have forgotten your username or password, please navigate to the grants portal at <https://apply.chanzuckerberg.com/> and click on the Log In link located in the upper right corner. Click the Forgot your password link and then enter the email address associated with your SMapply account. You will then receive an email with information to reset your password. Please note that your username is your email address.

Other questions: If you have other questions about using the portal, please use the information (“i”) link in the upper right corner of the window, where you will find a link to FAQs about using the portal, as well as links to submit specific help requests. If you have specific questions about the RFA, please contact us at sciencegrants@chanzuckerberg.com.

SUBMITTING AN APPLICATION

To submit an application:

1. Go to <https://apply.chanzuckerberg.com>.
2. Log in.
3. Click the green View Programs button that is displayed or click on the Programs link in the upper right corner. This will bring you to a listing of all programs/RFAs that CZI is hosting in SMAApply. To **find the program/RFA** you are looking for, you may need to scroll down.
4. Find the program/RFA you are interested in and click the green More button.
5. Click the green Apply button in the upper right and complete all sections (details below).
 - a. You will first be prompted to **enter the title** of your application, after which you will have access to the application tasks to complete. Proposal title is limited to 75 characters, including spaces. If you need to **edit your proposal title**, click on the My Applications link in upper right and click the green Continue button on the application you wish to edit. Once the application page opens, click on the three dots to the right of the application title (next to the Preview link) and select Rename from the dropdown menu.
 - b. The application is made up of several sections called tasks that are listed in the menu on the left side of the page. To **open a task**, click on the one you would like to work on. You can edit and complete tasks in any order. You may need to scroll down to see the remaining tasks.
 - c. Once you **complete a task**, click the green Mark as Complete button within the task. All tasks must be marked as complete before submitting. To **edit a task** after marking it as complete, click the three dots in the upper right of the task and select edit, which will re-open the task.
 - d. Your application will autosave every few seconds, but you can also click the Save & Continue Editing on each task as you go along to **save your application**.
 - e. In the tasks that require a PDF upload: If you need to **delete and replace a PDF** after you have uploaded it, click on the three dots to the right of the file under the Attach File section within the task and select Remove from the dropdown menu.
 - f. To **download your application**, click on the three dots in the upper right corner of the application page and select download. If you are within a task, first click on the Back to application link in the upper left. Please **be aware of any pop-up blockers** in your browser that may prevent downloading your application.
 - g. To **access an application that you have previously saved**, click on the My Applications link in upper right and click the green Continue button on the application you wish to edit.
6. Once all required tasks are completed, click the green Review & Submit button **to submit your application**.
 - a. If the button is grayed out, it means your application is not yet complete— please

be sure all required fields and uploads are complete within each task and that you have clicked the Mark as Complete button within each task.

- b. To **download your application**, click on the download link in the upper right corner. Please be mindful of **any pop-up blockers** that may be active in your browser that prevent/hide downloads.
 - c. Review your application in the window (or in the PDF that you have downloaded). If you want to make changes, navigate back to your application and reopen/edit any tasks that need editing. **It is strongly recommended that you download your application as a PDF (instructions above in part b) to review your application before clicking submit.**
 - d. Once you are **ready to submit**, click the green Submit Your Application button on the left side of the window. You will need to confirm your submission by clicking the green Submit button in the pop up window. **Once your application has been submitted, it cannot be edited. Please be sure that your application is complete BEFORE submitting.** If you inadvertently submit your application and it is before the deadline, please contact sciencegrants@chanzuckerberg.com.
7. Once your application is submitted, you will **receive an auto-email** confirming submission within a few minutes. If you do not receive a confirmation email within a few minutes, please check your spam folder. If you still did not receive your confirmation email, please email sciencegrants@chanzuckerberg.com.
 8. If you would like to view your application after you have submitted it, you can access it through the My Applications link in the upper right corner.

For the purpose of the application, we will use the following terms:

- **Applicant:** The person submitting the application materials on behalf of the software project(s)
- **Organization:** The organization directly receiving and distributing funding
- **Software Project(s):** The software project(s) that will be supported by the funding
- **Proposal:** The proposed use of funding
- **Key Personnel:** People involved in the software project(s) described in the proposal and supported by the funding

The application consists of the following sections (called tasks in the grants portal): Applicant Details Part 1, Applicant Details Part 2, Organization Details, Proposal Details, Optional Attachments, CV of Applicant, Budget Description, Number of Open Source Software Projects, Open Source Software Project Details

- **Applicant Details Part 1:** Complete all fields in this task; **all fields are required.** The information entered should be for the individual submitting the application who will act as the main person responsible for the application and as its point of contact. Information about other Key Personnel on the proposal should be entered where requested in the Software Project Details part of the application.
 1. First Name
 2. Last name
 3. Degrees
 4. Email
 5. Current employer/affiliation (enter n/a if self-employed/unemployed)

6. Title/Position
7. Country of Residence
8. Applicant Organization: Organization that would be directly receiving and distributing funding if a grant is successfully awarded. Note that this may be different from the Applicant's main affiliation/current employer.
9. Short narrative biography of the applicant (maximum of 100 words)

- **Applicant Details Part 2: Equal Opportunity & Diversity:** CZI Science supports the science and technology that will make it possible to cure, prevent, or manage all diseases by the end of this century. Everyone is affected by disease, yet different communities are affected by or experience disease in different ways. Moreover, due to systemic barriers, the scientific enterprise itself is not a place where all voices and talents thrive. We believe the strongest scientific teams — encompassing ourselves, our grantees, and our partners — incorporate a wide range of lived experiences and perspectives that guide them to the most important unsolved problems. To enable our work, we incorporate diverse perspectives into our strategy and processes, and we also seek to empower community partners to engage in science.

We track demographic information associated with applications submitted to CZI in response to our open calls. Based on our learnings, we take steps to broaden or adjust our strategies to improve our reach and to help ensure members of underrepresented or marginalized groups in science are aware of CZI opportunities and able to apply. **Please note that completing the below is voluntary, and demographic information will not be used in grant funding decisions.** All responses will be shared only with limited personnel, who will use that information only for the purposes described in this paragraph.

If you have any additional questions about why we ask this, what we do with the data, or to share suggestions for improvement, feel free to reach out to sciencegrants@chanzuckerberg.com.

The information entered should be for the individual submitting the application who will act as the main person responsible for the application and as its point of contact. **Please note that completing the below is voluntary, and demographic information will not be used in grant funding decisions.**

1. What is your gender? (optional)
2. Are you transgender? (optional)
3. Are you a member of the LGBTQ community? (optional)
4. What is your race/ethnicity? (optional)
5. What is the year of your last academic degree? (optional)

- **Organization Details:** Complete all sections in this task; **all sections are required.** The information entered should be for the organization that would be directly receiving and distributing funding if a grant is successfully awarded (e.g., academic institution, fiscal sponsor). Note that this may be different from the Applicant's main affiliation.
 1. Type of Organization: academic, other non-profit, industry/company, government, fiscal sponsor, fiscal sponsor not yet identified, or other (required)
 2. Organization:
 - Name, Address, City, State/Province and Country

6. Abstract/Proposal Summary: A short summary of the application (maximum of 250 words)
 7. Work Plan: A description of the proposed work the applicants are requesting funding for, including resources the applicants will provide that are not part of the requested funding. For software development related work (e.g., engineering, product design, user research), specify how the work fits into the existing software project roadmap. For community outreach related activities (e.g., sprints, training), specify how these activities will be organized, the target audience, and expected outcomes (maximum of 750 words)
 8. Milestones and Deliverables: List expected milestones and deliverables, and their expected timeline. Be specific and include (where possible) any goals for metrics the software project(s) are expected to reach upon completion of the grant (maximum of 500 words)
 9. Existing Support: List current and recent financial or in-kind support for the software project(s), including duration, amount in USD, and source of funding. Include in this section any previous funding for these software projects received from CZI (maximum of 250 words)
 10. Landscape Analysis: Briefly describe the other software tools (either proprietary or open source) that the audience for this proposal is primarily using. How do the software projects in this proposal compare to these other tools in terms of size of user base, usage, and maturity? How do existing tools and the project(s) in this proposal interact? (maximum of 250 words)
 11. Diversity, Equity, and Inclusion (DEI) Statement: Advancing DEI is a [core value](#) for CZI, and we are requesting information on your efforts in this area. Describe any efforts the software project(s) named in this proposal have undertaken to increase diversity, equity, and inclusion with respect to their contributors and audience. Please see [examples](#) from successful second cycle applications (maximum of 250 words)
- **Optional Attachments**: Upload in PDF format; attachments should be uploaded in a combined single PDF. Include up to three pages of additional information. This section can include figures, charts and tables, references for the proposal, or any additional material in support of the proposal (maximum of three pages)
 - **CV of the Applicant** (the person submitting the application): Upload in PDF format; include current and recent employment, education history, and references to any major publications, software contributions, or other relevant outputs (maximum of two pages)
 - **Budget Description**: Upload in PDF format; budgets can be uploaded in a combined single PDF or one PDF for each software project (one page per software project maximum)
 - Description of the costs to be funded by this grant at a high level and in narrative or tabular form, outlining costs for personnel (including names, if known), supplies, equipment, travel, meetings/hackathons/sprints, subcontracts, other costs, and up to 15% indirect costs (excluding equipment and subcontracts).

- Indirect costs are limited to up to 15% of direct costs and are included within the annual budget total. Indirect costs may not be assessed on capital equipment or subcontracts, but subcontractors may include up to 15% indirect costs of their direct costs.
 - Budget should be requested in US dollars.
 - International grantees must use all grant funds exclusively for activities conducted outside the United States of America. Travel expenses to the United States (including round-trip tickets) should not be covered from the requested grant funds.
 - Application budgets must reflect the actual needs of the proposal. The Chan Zuckerberg Initiative will work closely with successful applicants to arrive at a mutually acceptable budget after review.
- **Number of Open Source Software Projects:** Indicate the number of software projects involved in your proposal (up to five). You can request funding for work that includes up to five open source software projects. If multiple software projects are involved, details must be entered for all of them. **If your proposal involves more than one software project, mark this step as complete so you can fill in the details for additional software projects. This section must be marked complete in order to proceed to the Open Source Software Project Details #2 - #5 tasks.** To change the number of software projects indicated after marking as complete, click the three dots in the upper right of the task and select edit, which will re-open the task.
 - **Open Source Software Project Details #1 - #5:** Depending upon your answer to the “Number of Open Source Software Projects” task above, the corresponding number of tasks—one for each software project indicated above—will appear (Open Source Software Project Details #1 will appear by default). **You may need to scroll down using the scroll bar in the task menu on the left side of the page to see these tasks.** For each task/software project in this section, please complete the following; all URLs should be in the format <https://example.com> and **only one primary link should be provided:**
 - Software Project Details: Complete the following for each software project that will be supported by the grant:
 1. Software project name (required)
 2. Homepage URL (required)
 3. Hosting platform (GitHub, GitLab, Bitbucket, Other) (required)
 4. Main code repository (e.g. GitHub URL) (required)
 5. DOI of major publication(s) describing software project (if applicable)
 6. Social media handles (if applicable)
 7. Do you or software project key personnel have commit rights to the code repositories for this software project? (required)
 8. Short description of the software project (maximum of 200 words) (required)
 - List of Known Key Personnel: Key personnel are people involved in the software project who will be supported by the grant if the application is successful. Complete the following for each (up to 5) (required); enter n/a if any field is not applicable. Personnel to be hired that has not been identified at this time can be listed in the budget section. You may need to use the scroll bar at the bottom of the table to scroll right to view and to complete all fields. Alternatively, you can tab to move through and complete the fields. **To add another person/row (up to five), click the box at the end of the row.**

We collect (optional) gender statistics about the applicant team in order to study the gender diversity of teams applying for funding and to learn about diversity trends in the field. **Please note that completing the gender statistics is voluntary, and will not be used in grant funding decisions.**

- Name
- Email address
- Current employer/affiliation (enter n/a if self-employed/unemployed)
- Job title
- Developer username if applicable (e.g., GitHub handle)
- Country of Residence
- Do any of the Key Personnel self-identify as one of the following? (optional)
 - Woman, Man, Non-binary/Third gender, Prefer to self describe
 - If yes, how many of the listed key personnel self-identify as one of the above gender identities? **Please do not include requested information on a per person basis; we are looking for aggregated information (optional)**

Software Project Metrics:

- Quality (required)
 1. What is the software project license?
 - Permissive license (BSD 3-Clause, MIT, Apache 2.0)
 - Copyleft license (e.g. GPL, LGPL)
 - Another [OSI-approved license](#)
 - Custom license/other (please specify)
 2. What is the main programming language?
 3. Does the software project have a code of conduct? If yes, provide a link. Example codes of conduct: <https://www.contributor-covenant.org/> or <https://www.mozilla.org/en-US/about/governance/policies/participation/>
 4. Does the software project have end-user documentation? If yes, provide a link.
 5. Does the software project have an issue tracker? If yes, provide a link.
 6. Does the software project have a community engagement/Q&A forum (self-hosted, on Stack Exchange, etc.)? If yes, provide a link.
 7. Does the software project have contribution/coding guidelines? If yes, provide a link.
 8. Are there examples or demo notebooks, scripts, and datasets? If yes, provide a link.
 9. Is there a corresponding package available in a package manager (PyPi, CRAN, etc.)? If yes, provide names and links.
 10. Does the software project use continuous integration for testing?
- Impact (optional): Provide metrics for each open source software project that will be supported by the grant to help us assess its impact and quality. **Providing metrics is optional and metrics can be approximate.** For each metric, provide a source, clarify how the metric was computed and/or provide any other comments. For monthly metrics, provide data from the most recent month for which the corresponding metric is available.
 1. List the number and explanation for each, if needed:

- Number of scholarly paper(s) (including preprints) citing or mentioning the software project
 - Number of monthly users, if applicable (based on one or more of the following: monthly downloads from websites, monthly downloads from package managers, monthly unique requests for updates, actual tracked usage, etc.)
 - Number of software projects that depend on the software project (if applicable)
 - Number of monthly visitors to software project's website, discussion forum (e.g. Stack Overflow, Discourse), or similar
2. Size of the largest potential user base:
- Estimate the potential number of unique users who could adopt this software project in the relevant field/discipline and explanation, if needed. You can use as guidance the number of users of comparable software projects, the number of papers published in the domain to which the software project is applicable, number of labs able to adopt the software project, etc.
 - 1-10;
 - 11-100;
 - 101-1,000;
 - 1001-10,000;
 - 10,001-100,000; or
 - over 100,000.
3. List of upstream, downstream, or related software projects that the team is contributing to or receiving contributions from.
4. Additional metrics from software project code repositories and package managers:
- Provide a short description of any considerations or caveats we should be aware of when computing metrics (e.g., a recent change in the name or hosting of the repository), or any additional information you would like to share about the software project's impact and quality (maximum of 500 words)

The formatting and component requirements, including word and page limits indicated above, will be enforced by the review team. Any submitted materials that exceed the word and page limits or do not follow the requirements will not be considered during the application review process.

QUESTIONS?

For administrative and programmatic inquiries pertaining to this RFA, please contact sciencegrants@chanzuckerberg.com.

For technical assistance with SMAApply, please contact support@smapply.io, or while logged into SMAApply, click on the information “i” link in the upper right corner and submit a help request ticket.