

Google Al Impact Challenge Application Guide

At Google, we believe that artificial intelligence can provide new ways of approaching problems and meaningfully improve people's lives. That's why we're excited to support organizations that are using the power of AI to address social and environmental challenges. Selected organizations will receive customized support to help bring their ideas to life: coaching from Google's AI experts, Google.org grant funding from a \$25M pool, credit and consulting from Google Cloud, and more.

We're looking for projects across a range of social impact domains and levels of technical expertise, from organizations that are experienced in AI to those with an idea for how they could be putting their data to better use. Since 2005, Google.org has invested in innovative organizations using technology to build a better world. For more information on what we're looking for in this Challenge and what we mean when we say AI, please refer to our Frequently Asked Questions.

To help you understand how AI may be able to help your organization have greater impact, we've put together a set of **educational resources**. If you are new to AI, we recommend starting with the self-study Introduction to Machine Learning Problem Framing course.

We look forward to reviewing your ideas.

Criteria

- 1. Impact. How will the proposed project address a societal challenge, and to what extent? Is the application grounded in research and data about the problem and the solution? Is there a clear plan to deploy the Al model for real-world impact, and what are the expected outcomes?
- 2. **Feasibility.** Does the team have a well-developed, realistic plan to execute on the proposal? Does the team have a plan to access a meaningful dataset and technical expertise to apply AI to the problem? Have they identified the right partners and domain experts needed for implementation?
- 4. Use of AI. Does the proposal apply AI technology to tackle the issue it seeks to address?
- **5. Scalability.** If successful, how can this project scale beyond the initial proposal? Can it scale directly, serve as a model for other efforts, or advance the field?
- 6. Responsibility. Does the proposed use of artificial intelligence align with Google's Al Principles? See Google's Responsible Al Practices for practical guidance.

Instructions

Thank you for applying to the Google Al Impact Challenge! We look forward to reading your application. This PDF contains a list of the questions in the application form, for use in preparing your responses. When you're ready to apply, please do so by completing the application form.

A few notes before you begin:

- Responses in the application form cannot be saved for later completion. We recommend drafting your responses in a separate document first and only completing the form when the entire application is ready for submission. We estimate this application may take 1-2 hours to complete.
- All open-ended responses, unless otherwise specified, will be limited to 150 words. Please keep your responses within the indicated limit.
- Do not submit any confidential or proprietary information through this application.
- Applications must be in English to be considered.
- You must be using one of the following internet browsers: Internet Explorer 8 or newer, or the latest version of Chrome, Firefox, or Safari.
- Please review the Frequently Asked Questions and Google's Privacy Policy before proceeding.

We look forward to receiving your application on or before 11:59 p.m. PT on January 22, 2019, and we encourage you to apply early given that we expect high volume within the last few hours of the application window. Thank you!

Basic Information

- 1. What is the full, registered name of your organization?
- 2. If your organization has a website, please provide the URL.
 - a. Provide only one. You can share additional resources at the end of the application.
- 3. I certify that the organization for which I am submitting this application is eligible to apply for the Challenge. This means my organization meets the eligibility guidelines outlined in the FAQs.
 - a. FAQs are available here.
- 4. Which of the following best characterizes your organization?
 - a. Not-for-profit organization (non-academic)
 - b. Not-for-profit academic or research institution
 - c. For-profit business with social mission
 - d. Other (explain)
- 5. What is the official, registered address of your organization?
 - a. Street Address
 - b. City
 - c. State/County
 - d. Country
- **6.** When was your organization founded?
- 7. How many full-time employees does your organization have?
 - a. Do not include volunteers in this question only full-time, paid staff of your organization.
- 8. The name of the person completing this application is:
- 9. What is your job title?
- 10. What is your email address?

- 11. What is your contact telephone number?
 - a. Include country and area codes.

For questions below, please include fiscal year data for 2015, 2016 and 2017 **in US Dollars (USD)**. Estimates are fine; please do not include potential funding from the Challenge. If an answer is not applicable to your organization (e.g., if your organization has been around for less than 3 years), enter '0'. We may ask for additional financial information from your organization during our evaluation process.



- a. 2017
- b. 2016
- c. 2015
- 13. Annual revenues (USD):
 - a. 2017
 - b. 2016
 - c. 2015
- 14. Organization-wide, who are your major partners or funders from the last 3 years?

The Problem

We'd like to understand the societal problem your project would address.

- **15.** Tell us more about the social or environmental problem that the project in this application proposes to address. Why did you choose to take it on? Use metrics where possible: e.g., approximately how many people are affected, and how does the problem impact their lives?
- 16. To which category does this project primarily align?
 - a. [Multiple choice: Arts, Culture and Humanities; Crisis Response; Economic Empowerment; Education;
 Environment, Conservation, and Energy; Equality and Inclusion; Health; Infrastructure; Public and Social Sector management; Other]

The Solution

We would like to understand how you propose to address the problem above.

- 17. Tell us about your solution: in three sentences or less, what will you do to help address the problem above?
- **18.** Contextualize your idea: what other approaches have been tried in the past? What is the insight or innovation that differentiates your project, and how is it better than what already exists?
- 19. What will be different in five years in the field or the world if this project has succeeded?
- **20.** In what stage is your project presently? What have you accomplished to date? (Please note that we are willing to consider projects in the idea stage).
- 21. What geographic area(s) does your project impact?

Dataset and Use of Al

We want to understand the types of data involved in your work and your ideas to use AI.

- 22. How will AI help you solve the problem you articulated? How would you solve it if you didn't use AI? (Include metrics around speed, accuracy, cost, or scalability where relevant.)
- 23. Please describe any significant datasets you have (or would need) to implement your idea. For example, you may share information in the following categories
 - a. Datatype (e.g., images, text, videos)
 - b. Size (e.g., # images or rows)
 - c. Attributes (e.g., images, image metadata, image labels)
 - d. How frequently data is refreshed
- 24. Do you currently have access to this data? If not, how do you plan to collect or access them?
- 25. How has your organization used data in the past?
- 26. Does your organization currently use AI? (Prior AI experience is not required).

- 27. Tell us about how you would use the data in an Al model. What data would your model consume, and what information or decisions would it produce? (For example, the model may predict a future value to act on, automate an existing process, etc.)
- 28. How will you deploy the results of your model in the real world to address the problem and impact people or the environment? Detail any relevant partnerships necessary to reach these outcomes.

The following **optional** questions aim to understand your proposed use of Al in greater detail. Please complete those you are able to answer.

- 29. [Optional] What AI algorithm(s) are you using or do you plan to use? (Select all that apply)
 - a. [Multiple choice: Apriori Algorithm, Artificial Neural Networks, Collaborative Filtering, Decision Trees,
 Deep Learning, K Means Clustering Algorithm, Linear Regression, Logistic Regression, Naïve Bayes
 Classifier Algorithm, Nearest Neighbours, Random Forests, Support Vector Machine Algorithm, Other,
 Unsure]
- **30.** [Optional] If your organization is not currently using AI, what is the greatest deterrent? (Select all that apply)
 - a. [Multiple choice: Data availability and quality; Talent availability; Computing resources; Tool accessibility; Competing strategic priorities; Other]
- 31. [Optional] What Al framework(s) are you using or do you plan to use? (Select all that apply).
 - a. [Multiple choice: TensorFlow, Caffe, Torch, Microsoft CNTK, Apache Singa, AML (Amazon ML), Theano, Spark, Open C.V, cuDNN, Excel, Other, Unsure]
- **32.** [Optional] What are your success metrics for the AI system (i.e., how will you know whether the system has succeeded or failed)?
- **33.** [Optional] Is your dataset currently labeled with output examples for training purposes? If not, how do you plan to label the data, and how much effort will this take? (e.g., person hours)
- 34. [Optional] How do you plan to maintain and refresh the model?
- **35.** [Optional] All datasets are biased in some way. How is your dataset biased, and what's your plan to mitigate the impact? (For more information on dataset bias, see Google's resources on ML Fairness and Responsible Al Practices)

Impact and Risks

We are looking for projects that will drive real-world impact for people or the environment.

- 36. How will you measure and evaluate your project's success?
- **37.** How will you sustain and grow the impact of this work beyond this grant? How could your project and its impact grow beyond what you've proposed in this application?
- **38.** What are the 1-2 most significant risks you anticipate in this project? How does your team plan to address them?
- **39.** On this project specifically, which partnerships are or will be most critical for your success? What is the incentive for those organizations to partner with you?

Team, Partners and Budget

- 40. Who on your organization's staff will lead this project, and what makes them best suited to do this work?
- **41.** Who will be leading the Al work? Please describe their technical qualifications. (These could be employees of your organization, or of a partner. Please note that prior experience with Al is not required.)
- **42.** [Optional] Applicants may find it valuable to engage a partner organization to advise on or implement the AI work. If you will be doing so, please provide more information:
 - a. Organization name: [text field]
 - b. Organization website: [text field]
 - c. Plan for partnership: [text field]
- **43.** How would your project utilize Google.org funding? What is a budget that would allow you to accomplish your goal? Please provide a rough breakdown.
- **44.** Over what time period would you expect this work to happen? The grant period for funded projects can last between 12 and 36 months from the time of award.
- 45. If applicable, please explain how you will use any profit that your project earns.

Optional Information

- **46.** [Optional] Please include links to up to 3 articles, publications, videos, or other resources that are relevant to your proposal.
- **47.** [Optional] What else we should know?
- 48. [Optional] How did you hear about the Challenge? (Select all that apply)
 - a. A colleague, friend, or another applicant
 - b. Email from Google
 - c. Email from another organization
 - d. Press (print, radio, or TV)
 - e. Social media
 - f. Other

Certification

- **49.** Does your organization have any ongoing commercial contracts or negotiations with Google that are directly related to the project detailed in your application? (For the sake of clarity, this does not include Google's standard product offerings like G Suite, Google Ads, etc.)
- **50.** If Yes to the above question, please explain here.
- **51.** Check here to certify that you have reviewedGoogle's **AI Principles** and **Responsible AI Practices** and ensured that the project featured in this application will be aligned with this guidance.
- **52.** Check here to confirm that you agree: by submitting an application, I certify on behalf of my organization that: 1) The organization agrees to be contacted by Google for purposes of carrying out the Challenge, 2) All information contained in this application is true and accurate, 3) The organization meets the eligibility requirements specified in the Frequently Asked Questions, and 4) None of the information in this application is confidential or proprietary.
 - a. Note: The information you submit will be used in accordance with Google's Privacy Policy. If you do not wish to submit your application or cannot certify for your organization, do not check the box above. If you do not certify, nothing in your application will be saved or sent to Google.