Grantser: Create Arbitrum Grant Proposals That Get Funded

Arbitrum GovHack Track

:

DAO operational excellence

Challenge Statement:

Create a high-quality, unique grant proposal that gets funding

Members:

Jacob Habib, Ivan Manvelov, Fabio Anaya

Team Lead: @jahabeebs

on X or Telegram or Discord

Pitch: Grantser

Proposal:

Abstract

Grantser is a public good platform for creating high-quality, unique grant proposals for Arbitrum. It's a boon for the Arbitrum ecosystem with two components: a repository of successful grants and an AI tool for giving feedback on a draft proposal, calculating a similarity score, and evaluating the proposal against a checklist of Arbitrum-specific grant requirements.

Motivation

During the Arbitrum GovHack, multiple teams identified the following problems with the grant proposal process:

- It's difficult to know how to prepare a proper grant proposal that's eligible to get funded and gain community support.
- The grant proposal process is too slow–especially for smaller projects.
- Grant applicants who submit subpar grant proposals have to spend extra days or weeks iterating on feedback from the DAO, or even worse, get no feedback and give up on the Arbitrum ecosystem.

Grantser is a platform built to address these issues. It's designed to empower individuals and teams to create proper grant proposals faster. DAO members won't have to continue responding to dozens of subpar grant proposals with the same advice. Additionally, DAO members will feel empowered to know that the time they invest in improving one grant proposal won't be lost to time and continue improving draft proposals with no extra effort for them.

Rationale

· Sustainable:

The advice given to proposals made in Tally and Discourse won't be lost to time—the valuable conversations that DAO members have around proposals will be used to train models that refine draft proposals without human effort.

· Socially inclusive:

Members of all levels will be able to engage effectively with the grants process, regardless of knowledge, resources, geography, language, and life experience.

· User-focused:

By creating high-quality proposals, we can create a better foundation for the products that grant recipients build.

· Neutral and open:

Grantser is meant to be a DAO neutral infrastructure product and consequently, it will encourage competing products within different DAOs both within and outside of the Arbitrum ecosystem.

Key Terms

· Fine-tuning:

Pretraining a machine learning model and training it on a smaller, targeted data set. For example, training a generic LLM model on the specific conversations within the Arbitrum Discourse.

• LLM:

Large language model. A machine learning model that can comprehend and generate human language text by analyzing massive amounts of human language data. The GPT LLM, used in ChatGPT, is the most famous.

Specifications

· Front-end application:

a TypeScript Next.js application built with a neutral component library (like shadcn/ui). This stack is very popular among web developers and makes it easy to build and maintain the application.

· Al chatbot:

Part of the proposal is doing a cost-benefit analysis of the technical options for the chatbot, however, the infrastructure of the chatbot would look like the following: * An OpenAl/Replicate or other hosted fine-tuned model: in this case, we would not need to populate or maintain a vector database, we would access the model through an API call on the front-end application, and a user could even talk to the chatbot about Arbitrum DAO Discourse proposals via the OpenAl/alternative provider UI if they were provided the model name.

- An OpenAl/Replicate or other hosted fine-tuned model: in this case, we would not need to populate or maintain a
 vector database, we would access the model through an API call on the front-end application, and a user could even
 talk to the chatbot about Arbitrum DAO Discourse proposals via the OpenAl/alternative provider UI if they were
 provided the model name.
- Domain:

a domain would be purchased through a DNS provider like Namecheap or Cloudflare.

Steps to Implement (see comment for details)

The steps to implement the AIP, including associated costs, manpower, and other resources for each step where applicable. AIPs that involve transactions with third parties (such as grants) will need to ensure that applicable legal documentation and procedures are also included.

- Domain
- Front-end development (1-2 mid to senior-level developers)
- Research & Model training (1-2 mid to senior-level developers)
- · Business development

Timeline

· Start date:

April 1st

Milestone 1 (April 15):

The training methodology for the AI chatbot should be finalized after doing a cost-benefit analysis of training various models on Discourse data (Mistral, ChatGPT, Replicate).

• Milestone 2 (May 1st):

The following front-end work should be completed: * A simple landing page explaining the purpose of the application with a

link to launch the application.

- · Completed front-end application minus a payment gateway.
- · A crude version of the AI chatbot-the relevant API should be integrated but not be working effectively still.
- A simple landing page explaining the purpose of the application with a link to launch the application.
- Completed front-end application minus a payment gateway.
- A crude version of the Al chatbot-the relevant API should be integrated but not be working effectively still.
- Milestone 3 (May 15th):

The training of the AI chatbot should be completed, and it should be working effectively. The payment gateway should also be integrated into the application.

• Milestone 4 (June 1st):

The full launch of the application, including all planned features and the AI chatbot working as intended.

• Mileston 5 (August 1st):

The incentive program should be completed and evaluated if the requirements have been met

Overall Cost (see my comment for cost breakdowns)

· Initial lump sum cost:

\$20,000

· Success incentive:

Additional \$20,000 upon meeting specific criteria

Budget (see my comment for cost breakdowns)

Web Development & Maintenance

- Front-end landing page + platform development + necessary integrations:
- \$6,052
- \$6,052
- Domain:
- \$48
- \$48
- Ongoing Al training & maintenance for 4 years:
- \$9,600
- \$9,600

Al Training Costs

· Cost-benefit analysis of various models:

\$400

- Research and written open-source training methodology for pulling data from Tally & Discourse, creating JSONL files for model training:
- \$400
- \$400
- Training costs on Tally & Discourse text:

- \$500
- \$500
- Data cleaning, data labeling, training models on successful and failed Tally grants proposals since DAO founded:
- \$1,000
- \$1,000

Business Development

- Cold outreach, networking with other DAO stakeholders via Twitter and LinkedIn, participating in conferences:
- \$2,000
- \$2,000

Retroactive Incentive Program (see my comment for details)

· Total:

\$20,000 * Developer(s) will receive a \$15,000 incentive if certain criteria are met by August 1st

- Business development representative(s) will receive a \$5,000 incentive if certain criteria are met by August 1st
- Developer(s) will receive a \$15,000 incentive if certain criteria are met by August 1st
- Business development representative(s) will receive a \$5,000 incentive if certain criteria are met by August 1st