

# RISKY SPACE BUSINESS: NASA AI RISK PREDICTION CHALLENGE

IN COLLABORATION WITH The NASA LMI logo, featuring the NASA "meatball" logo to the left of the letters "LMI" in a bold, sans-serif font.

## SUBMISSION FORM

Please upload all required documents to your entry on the Challenge webpage: <https://www.freelancer.com/contest/Risky-Space-Business-NASA-AI-Risk-Prediction-Challenge-2008562>:

- Completed Submission Form (this document)
- Any files you refer to in this Submission Form (e.g., Diagrams or output files)

If you have any questions, please contact [nasa-gcd@freelancer.com](mailto:nasa-gcd@freelancer.com).

*Submission Deadline: **February 7, 2022 at 5:00 PM ET***

### 1. Submission Title:

### 2. Your Information

*If you are participating as a team, please enter the Team Lead's details only. Please ensure the information provided below matches your approved Registration Form.*

First Name:

Last Name:

Email:

Freelancer.com Username:

### 3. Executive Summary **[limit 500 words]**

- Describe your solution and provide context for your solution for the judges.

#### 4. Proposed data to be collected [limit 1500 words]

- Recommended data fields and data structures to be used based on past data.
- Recommended new data fields to improve risk analysis.
- Describe the proposed structure.
  - Describe how the structure works with existing risk data (NASA's or another dataset) and how it will help predict risks and identify unknown risks on projects.
  - Provide a visual of your data fields and structure. For example, you can create a wireframe, picture, data schema, or diagram. Upload a file or provide a link.
- Describe how the structure supports program management needs, isn't overly constraining, and is easy to adopt.
- Describe how the output can be used by AI/ML to categorize and predict risk.

**5. Proposed method to populate the existing data into the new format [limit 1000 words]**

- Describe the data extraction process, approach to working with GCD documents or your own dataset, the methodology applied to the process
- If you have an algorithm, demonstrate the data extraction process by showing the output from the algorithm. Provide the source code file name, instructions for use and compilation including any environmental requirements and dependencies, and sample outputs, if available. Upload the code to GitHub (instructions below).

**6. Proposed method for predicting risks for each project given the new structured format [limit 1500 words]**

- Describe the process, approach, and methodology using GCD data or your own dataset.
- Describe the method of building a library of risks and classifying risks from past projects
- Describe how you could use this to identify unknown risks

**7. If external data sources are used in your analysis**, provide information about the source. For example, type of data, how it addresses risk, and the output risk analysis. Provide as much information as you can about the data source. Leave blank if not applicable.

**8. If any algorithms are included**, please provide the following information:

- Demonstrate the process.
- Provide the source file name, instructions for use and compilation including any environment requirements and dependencies, and sample outputs, if available.

**To share your code:**

1. Upload your solution and code to a private GitHub repository.
2. Add "***enterprise-admin@freelancer.com***" as a collaborator.
3. Make sure "***enterprise-admin@freelancer.com***" has permissions to fork your repository.

Your GitHub Username:

Your GitHub Repository Name:

Link to your GitHub Repository:

## CERTIFICATION

I certify that all information included in this submission is my own work.

If algorithms are included, I certify that I have provided my GitHub information.

I certify that I have read and abided by all rules of the competition.

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Signature of Team Lead

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Date

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