

Project Proposal

This project proposal is designed for individuals or teams of up to 3-4 members to submit a concise, two-page proposal outlining the following key elements of their project:

- 1. The goal of the project (10%)** - Clearly state what problem it aims to solve.
- 2. Importance of the problem/project (10%)** - Explain why this problem or project is important and relevant.
- 3. Data sources (10%)** - Outline the data sources that will be used for model building. Consider using an existing tabular dataset for prediction or classification problem, or justify the decision to develop your own dataset, ensuring that it can be generated by the end of February and that you have the necessary capacity to collect the data, including personnel, hardware, and permission. Also, address any potential ethical issues associated with data collection and use.
- 4. High-level approach (20%)** - Provide a high-level overview of how you plan to solve the problem, for example, "We will take an ensemble approach to distinguish between X & Y".
- 5. Sample size & EDA (20%)** - Justify that you have enough samples in the dataset and how you will deal with the challenges in the data (class imbalance/ null values). Provide evidence such as similar tasks performed with similar data set sizes or initial results/experiments as good justification. Please deliver some chart by doing EDA.
- 6. Peer-reviewed article (20%)** - Cite at least two peer-reviewed articles related to your project and explain how it is relevant to your work. Describe the approach used in the paper but note that you do not need to follow it completely. Also describe, how can you improve it.
- 7. Timeline, Responsibilities of the members & References (10%)** - Include a timeline for different steps of the project, including data collection, model training, model evaluation, and deliverables. Also, mention the responsibilities of the members (every member should participate in presentation and coding). References should be in a proper format. You can use Zotero/mendely/other tools for this purpose.

Template: Please submit your project proposal using the ACM Primary Article Templates. You can find versions of this template for [Word](#) or [LaTeX \(or Overleaf\)](#).

Overall, the proposal should be clear, concise, and to the point, providing a comprehensive overview of the project while addressing all the key elements.