PROJECT PROPOSAL TEMPLATE

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Contents

Abstract

(200 words maximum) The abstract should state the motivation, that is, why the study will be done or which problem will be addressed, which method will be used, as well as the expected results and contributions or implications of the work. Give details. See for example the abstract in (Krizhevsky, Sutskever, & Hinton, 2017). In addition, include a graphical abstract as seen in Figure 1.

Abstract

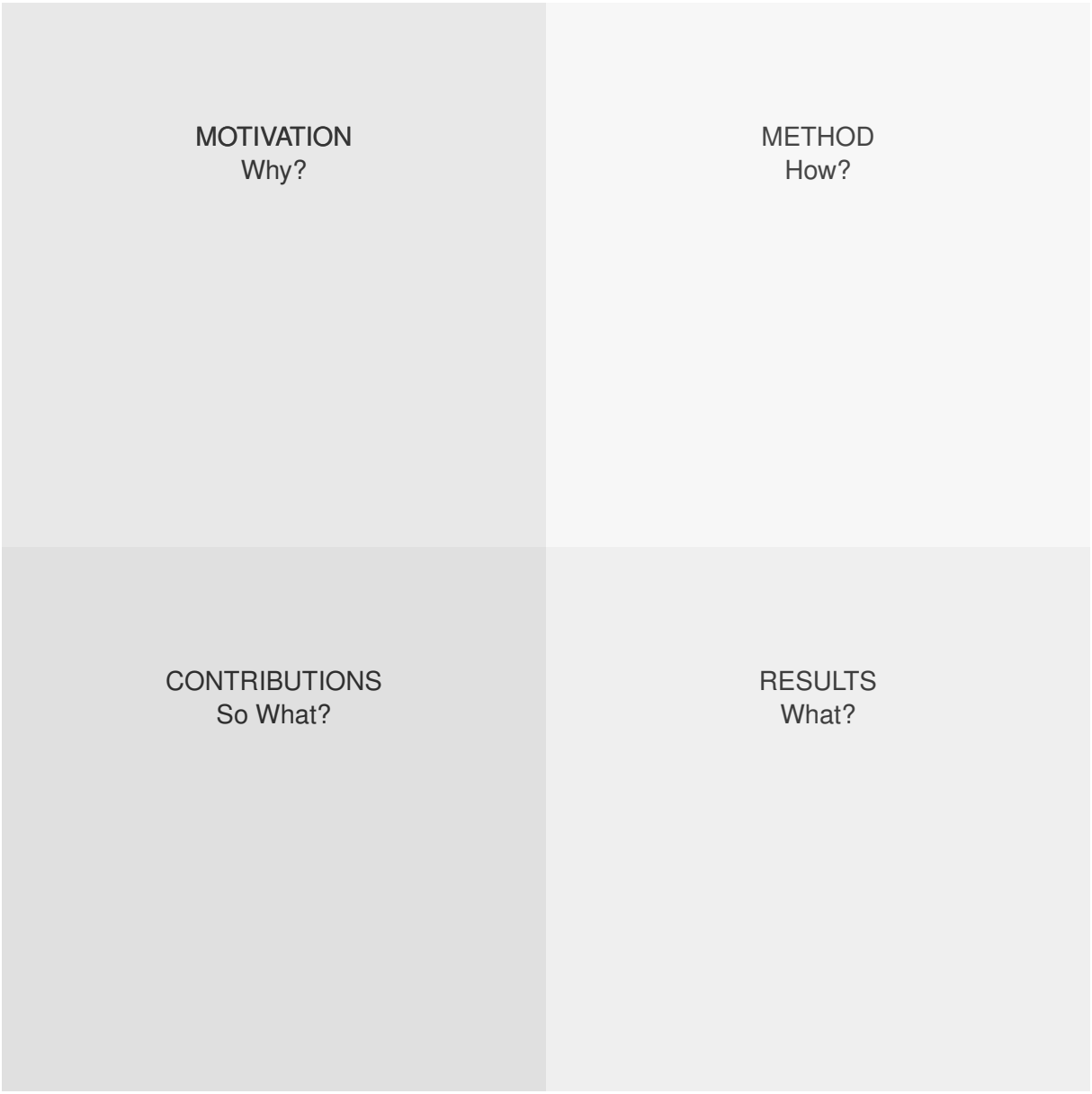

Figure 1: Graphical Abstract. Include a graphical abstract of the proposal with the motivation, method, expected results and contributions. Examples of graphical abstracts can be found in (Elsevier, 2024; Velarde et al., 2024).

Reference	Task	Performance	Dataset	Comment

Table 1: State-of-the-art comparison Table.

1 Introduction

(No changes are needed in this section at the moment of project proposal.) Please use this template to present a project proposal. As the project advances, this template should be updated until it becomes your final document.

2 The State-of-the-art

(100 words maximum, 2 research papers minimum, 1 Comparison Table) Describe and reference the state-of-the-art, primarily focussing on peer-reviewed scientific publications. Explain how these works relate to your proposal. Use the American Psychological Association (APA) style for citations (Hughes et al., 2017).

Present the State-of-the-art in a comparison table. Fill or adapt Table 1. For example, if the task is classification, the performance column should include the reported F1, Precision, and Recall on a given dataset or datasets. Add a comment if necessary.

3 Objectives

(150 words maximum) Describe the main objective and sub-objectives of the project. Alternatively propose a hypothesis and its research questions.

4 The method

(A Figure) Present the intended method graphically. Fill Figure 2. Include the intended dataset, techniques, and evaluation framework. Add as much detail as possible in the figure. See for example Figure 1 in (Sossi-Rojas et al., 2023), or Figure 2 in (Badrinarayanan et al., 2017).

4.1 Data

(Minimum 1 Dataset) List and describe the dataset or datasets to be used.

5 Results

(No changes to this section are needed at the initial stage) This section is reserved to present the results.

Figure 2: The intended Method.

6 Expected Contributions / Conclusion

(Maximum 5 sentences of less than 25 words each) List 5 expected contributions of your proposed project. This section can be renamed as ”Conclusion”.

A The plan

(Include a Gantt chart with tasks and their expected duration) Include the specific dates of begin and end.

B Agreements and constraints

(100 words maximum) State if:

- the work can be published without restrictions, or
- if it needs a confidentiality agreement.
- In addition, mention the stakeholders if any.

References

Badrinarayanan, V., Kendall, A., & Cipolla, R. (2017). Segnet: A deep convolutional encoder-decoder architecture for image segmentation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, *39*(12), 2481-2495. doi: 10.1109/TPAMI.2016.2644615

Elsevier. (2024). *Graphical abstract.* `https://www.elsevier.com/researcher/author/tools-and-resources/graphical-abstract`. ([Online; accessed 4-April-2024])

Hughes, J. L., Brannan, D., Cannon, B., Camden, A. A., & Anthenien, A. M. (2017). Conquering apa style: Advice from apa style experts. *Psi Chi Journal of Psychological Research*, *22*(3), 154–162.

Krizhevsky, A., Sutskever, I., & Hinton, G. E. (2017). Imagenet classification with deep convolutional neural networks. *Communications of the ACM*, *60*(6), 84–90.

Sossi-Rojas, S., Velarde, G., & Zieba, D. (2023). A machine learning approach for bitcoin forecasting. *Engineering Proceedings*, *39*(1). Retrieved from https://www.mdpi.com/2673-4591/39/1/27 doi: 10.3390/engproc2023039027

Velarde, G., Weichert, M., Deshmunkh, A., Deshmane, S., Sudhir, A., Sharma, K., & Joshi, V. (2024). Tree boosting methods for balanced and imbalanced classification and their robustness over time in risk assessment. *Intelligent Systems with Applications*, *22*, 200354. Retrieved from https://www.sciencedirect.com/science/article/pii/S2667305324000309 doi: https://doi.org/10.1016/j.iswa.2024.200354