

# Proposal Title

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## I. MOTIVATION

Briefly explain and motivate the problem. Why is it an important problem? Which stakeholders stand to (potentially) benefit from your research results and how so?

Adding citations here to a conference paper [1] and a journal article [2] to illustrate how to use BibTeX (see `references.bib` for the bibliography entries).

## II. DATA

Explain where and/or how you will acquire the data that you need to conduct your study. Consider breaking this down into subsections that explain the raw extraction (e.g., downloads of large archives of data) or collection process (e.g., writing crawler scripts or simulation experiment scripts), the cleaning process (i.e., how will you mitigate noise from the raw data), and the analysis process (how will you process the cleaned data to answer your research questions?).

## III. PROJECT MILESTONES

Break your project down into a list of milestones that can be used to make sure that your project is on schedule. If you drift off schedule, the milestones should help you to recognize the need to pivot or reevaluate your plan.

## IV. EXPECTED OUTCOME

Provide a list of contributions that you believe your work will make. These may be conceptual contributions (e.g., results of empirical analyses, case studies), technical contributions (e.g., prototype tools, evaluated algorithms), or both.

## REFERENCES

- [1] K. Gallaba, M. Lamothe, and S. McIntosh, "Lessons from Eight Years of Operational Data from a Continuous Integration Service: An Exploratory Case Study of CircleCI," in *Proc. of the International Conference on Software Engineering (ICSE)*, 2022, pp. 1330–1342.
- [2] S. McIntosh and Y. Kamei, "Are Fix-Inducing Changes a Moving Target? A Longitudinal Case Study of Just-In-Time Defect Prediction," *IEEE Transactions on Software Engineering*, vol. 44, no. 5, pp. 412–428, 2018.