

CSC-578B Project Proposal

Derek Robinson, Keanelek Enns, Neha X, Manish Sihag

Department of Computer Science

University of Victoria

Victoria, Canada

drobinson@uvic.ca, keanelekenns@uvic.ca, manishsihag@uvic.ca

I. MOTIVATION

- 1) We agree with authors' motivation in [1] (developers should understand attributes that correspond to long lasting projects). Therefore we want to see if the study was credible and if there were any gaps in the study.
- 2) We want to see if there are any differences between the Bayesian approach and the methods used in the paper. Do they both find the same thing?
- 3) If we have time, we would like to see if there are other attributes that can predict longevity of a project (or maybe test other threshold values)

II. MATERIALS AND METHODS

- 1) We will follow the methods outlined [1] for the replication portion of our study.
- 2) In the comparison portion of our study we will take a Bayesian approach to survival analysis as outlined in [2]

III. LIMITATIONS

[Derek: I feel like we need to brainstorm some limitations because I am at a loss]

IV. EXPECTED RESULTS

We expect to find similar results to that of [1] using the same method. We will then compare the results of the Bayesian approach to those of our replication.

REFERENCES

- [1] R. H. Ali, C. Parlett-Pelleriti, and E. Linstead, "Cheating death: A statistical survival analysis of publicly available python projects," in *Proceedings of the 17th International Conference on Mining Software Repositories*, 2020, pp. 6–10.
- [2] R. Kelter, "Bayesian survival analysis in stan for improved measuring of uncertainty in parameter estimates," *Measurement: Interdisciplinary Research and Perspectives*, vol. 18, no. 2, pp. 101–109, 2020.