

NORTHEASTERN UNIVERSITY, KHOURY COLLEGE OF COMPUTER SCIENCE

CS 6120 Natural Language Processing Project Proposal Template Due: March 27, 2024(100 points)

NAME(s) E-MAIL(s)

1 Proposed Objective

In one or two sentences, please provide the objective of your work. The objective is a concise statement for the problem that you are solving.

2 Motivation

The Heilmeier Catechism is a useful framework when proposing problems to a skeptical audience. In this section, properly motivate your problem and describe why it is important, mentioning the impact of the work.

3 Background and Dataset

This section should describe how this problem arises, who is affected, and any literature that you plan on reviewing or survey. These references should relate to both the applications of the work as well the technical approaches to be taken. Emphasize why they are appropriate and relevant.

4 Proposed Approach / Implementation Details

In your approach, discuss the objective that you are attempting to satisfy and your approach to optimizing for it. There are many factors, and learning algorithms may be a small portion of your processing. In your proposal, include how you're considering the scale of data, the noise that you might face, the imbalance of the feature values and labels. Specifically (and briefly), address the following bullet points.

- what pre-processing you'll need to do
- how you intend on remediating class imbalance
- what learning algorithms you intend to try
- how you will validate and evaluate your results

You can work on this project on your own, or you may work in groups of four at most.

5 Submission Guidelines

Upload your PDF file to Gradescope as a *single* submission with all members of the team. On the top of the document, include the teammates and their LDAP/E-mails. *Try to keep your proposal below three pages.*