

Title: Template for the Research Proposal for CSCI4352

Team 1
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Date

Summary of the Proposal

Write a brief summary of the proposal. The summary should not exceed 120 words and best be a paragraph long. The summary should include a few lines about the background information, the main research question or problem that you want to write about, and your research methods. The proposal summary should not contain any references or citations. Remember that your entire proposal cannot exceed 1500 words, so choose the words in this section carefully. The 1500 words you will write in the proposal document will exclude any words contained in the tables, figures, and references. You can use this template for writing your proposal.

Background

In the background section, write briefly using as many paragraphs, lists, tables, figures as you can about the main problem you select to study for your research. Remember that this will need to be a quantitative research study. It means that you have to measure a performance of your method to solve the problem. In the background section, you will generally organize your writing along the following:

- Start by writing what we know about the topic/problem/application/data
- Start by writing what we can do about the topic/application/data
- Then write about how we can resolve the problem with the data in the application

These are typically addressed or organized along three or more paragraphs. In ML research, it is usual and common that the first paragraph starts with some description of the problem. Say you are interested to develop a new algorithm or improve the existing approach/algorithm to resolve the problem with a new data set. So, you may want to write:

- Start with what is the problem and application
- Then write about what is done so far (what approaches have been proposed and what limitations are in the proposed methods)
- In the third subsection of this argument you will write about your own idea to resolve the limitation to improve the performance (e.g. accuracy)

Goal and Objectives

You insert a separate section here and write about the goal(s) of your research and the objectives that will meet the goal. Typically, the way to write this is something like, "The goal of this research is to ...", and then continue with something like, "Goal 1 will be met by achieving the following objectives ...", and so on. The goal is a broad based statement, and the objectives are very specific, achievable series of statements that will show how you will achieve the goal you set out.

Data and Methods

This is going to be the third and final section of your proposal. In the data and methods section, you include the following items:

- Write about the data that you will extract, generate, or use.
- You will describe in details about the data like type, size and dimension.
- Write about the method you may use.
- Write about how to improve the method.

Timeline

References