

Project Proposal

Deadline: Posted in WebCampus

Capstone Project Proposal Guidelines

Submit your project proposal as a single PDF file created using LaTeX (with BibTeX for references). Proposals that do not meet this requirement will receive zero credit. In this and all subsequent reports, cite all materials (e.g., books, articles, webpages, etc.) that you use.

Report Structure

Submit a formal project proposal for your Capstone Project. The proposal should have the following structure.

The report format is IEEE conference format as specified in the below link.

<https://www.ieee.org/conferences/publishing/templates.html>

The structure should follow the below:

1. Abstract and Introduction

The content of this section should explain the following:

Problem Statement: What is the problem you are trying to solve? It should be similar to the research paper that you are trying to replicate.

Importance: Why is this an important problem?

Challenges: Why is this a challenging problem?

Solution: What will you be developing to address the problem?

Contribution: Describe your contribution.

2. Related Work

Existing Solutions: What are the existing approaches to solving this problem? Minimum 5 references. Prior work within the past 5 years.

Comparison: How will your approach be different/better?

3. Design and Implementation

Solution Strategy: How will you solve the problem?

Product Description: What product will you be building?

Algorithms: What are the algorithms involved if any?

Implementation: How will you be implementing it?

Methodology: What hardware will you use? What operating system will you use? What programming language will you use? What libraries will you use?

4. References

Citations: Include all references in IEEE format using BibTeX for citation management.

Grading

- (1 point) **Technical Detail:** Detailed explanation of the solution approach, architecture, algorithms, implementation, hardware, operating system, programming language, and libraries.
- (4 point) **Scope of the Project:** The definition and achievability of the project's goals and how well they align with the overall project objectives.
- (4 point) **Novelty:** The level of originality or innovation in the proposed solution.
- (1 point) **Ideas Related to Theme:** Relevance and alignment of the proposed solution with the overarching theme of the capstone project.
- (5 point) **Writing:** This evaluates how well-written and organized the project documentation is, considering readability and language quality.

Grading Rubric

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)	Weightage
Technical Detail	All parts of the solution like approach, architecture, tools are clearly explained with no missing details	Most parts are explained well, with minor details missing.	Some parts are explained, but important details are missing.	Many important details are missing, and the explanation is unclear.	1 point
Scope of the Project	Goals are very clear, realistic, and fit the project. The project is doable with time and resources.	Goals are mostly clear and doable but may be a bit too big or small.	Goals are somewhat clear, but the project is either too big or too small.	Goals are unclear, unrealistic, or don't fit the project.	4 points
Novelty	The project is very original, bringing new ideas or improvements.	There are some new ideas or improvements in the project	The project has limited new ideas, mostly based on existing work.	The project lacks originality or new ideas.	4 points
Ideas Related to Theme	Strong connection to the project theme,	Good connection to the theme but	Some connection to the theme, but	Little to no connection to the project theme	1 point

	covering all aspects well.	missing some details.	important parts are missing.		
Writing	Exceptionally well-written, clear, and error-free. Logical flow and strong structure.	Well-written with minor grammatical or structural issues, overall clarity maintained.	Adequately written but with noticeable grammatical errors or lack of structure.	Poorly written, with numerous errors and unclear structure, hindering readability.	5 points

In the event that the Project Proposal is not submitted or presented, a score of zero (0) will be assigned for the entire project evaluation.

Submissions

Your project proposal must be submitted as a single PDF file. Include your name, affiliation, student email and student id as per report format. Only one submission per group is required.