

# Boise State University

## Department of Computer Science

### **Masters Thesis/Project Proposal**

When a thesis topic has been firmly established, the student should submit a thesis/project proposal. It is recommended that the student accomplish this at least one full semester before the thesis is defended, and it should be completed before other work on the thesis or project is started. No completed thesis/project can be defended without first having the proposal presented and approved.

### **Proposal Document**

The thesis/project proposal is a written document that should follow the outline below.

Title Page

**Introduction** - This introduces the work to be done so it can be reasonably well understood by a faculty member not working in the research area.

**Thesis/Project Statement** - A concise statement of the thesis/project, e.g., the hypothesis to be tested, the thesis to be defended, the project to be completed, the question to be answered, etc.

**Methods** - The method to be followed in accomplishing the thesis/project statement, i.e., proposed algorithms, procedures, controls, sample sizes, experiments, and expected results, etc.

**Thesis/Project Schedule** - A schedule for completion of the thesis.

**Bibliography** - A fairly complete bibliography of the area of work. It is recommended that the bibliography be annotated.

**Artifacts** - A description of any artifacts beside the write-up for the project or thesis, i.e., code, user's guide, etc.

**Signatures** - A standard acceptance page including the date and all members of the committee and the Graduate Coordinator.

**Written Proposal Audience:** CS faculty members who may not be acquainted with the topic.

**Proposal for Paper Thesis:** The introduction should provide necessary background and then state a problem and explain why the problem is interesting. The thesis

statement should say what the proposed solution is and say why the proposed solution solves the problem. The method section should convince the reader that the problem will be addressed using an appropriate combination of proof, implementation, and experimentation. The annotated bibliography should be complete and appropriate. It should convince the reader that a thorough literature search has been completed. (An exception to completeness should only be appropriate for theses that are themselves to become survey papers.) The reader should be convinced that the proposed contributions are real.

**Proposal for Project:** The motivation should provide necessary background and then argue that a significant piece of work (usually a piece of software) is needed. The project statement should concisely describe the work. The method section should describe the requirements and expectations for the finished product and explain what will be done to assure the quality of the work. The annotated bibliography should convince the reader that the student is well acquainted with techniques needed to do the work and with techniques others have used to solve similar problems. The contributions should reflect the importance of the work. It is important to discuss how the work will be disseminated to others.

**General Comments:** If the document does not meet these standards or similar standards for a traditional thesis, it should not be signed until it does. Feedback and correction is an integral part of a student's education.

## **Proposal Presentation**

**Oral Presentation Audience:** CS faculty members who may not be acquainted with the topic.

A **20 minute** oral presentation of the proposal must be carefully organized and given to the members of the thesis/project committee and the invited public. During the proposal presentation, the student must answer committee member's questions on such areas as method, significance, organization, and literature search. After the presentation, the student and public leave the room while the committee comes to a decision on proposal acceptance. The result will range from unqualified acceptance to unqualified rejection.

**General Comments:** A simple restatement of the proposal document is *not* what is wanted. The central ideas of the document should be presented, but this should be augmented by examples and explanations. Ideally, the presentation will have been practiced in front of an audience that can help the student improve the presentation. Part of what should be learned is how to make good presentations.

## **Proposal Instructions**

**Before Scheduling:**

- Create and write up the proposal under the supervision of your advisor.
- Get verbal agreement from your advisor and second committee member that the proposal is now in final form.

**1 week to 10 days before:**

- Provide copies of your final proposal for each of the three members of your committee. (If you do not have a third committee member, see the Graduate Coordinator.)
- Arrange for a date, time, and place to present your proposal. Make sure all three members of your committee can attend. The secretaries can schedule a room for you, if necessary. Reserve one hour for the proposal; your presentation should not extend beyond 15 minutes, but additional time will be needed for questions from the audience and your committee.

**Proposal day or after:**

- Obtain signatures of all members of your committee and the Graduate Coordinator on the acceptance page in your proposal.
- Leave the signed copy of the proposal with the CS department staff.

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Proposal Acceptance Form

Proposal for (circle one)                      Thesis                      Project

Name \_\_\_\_\_

Date \_\_\_\_\_

Proposal Title: \_\_\_\_\_

\_\_\_\_\_

The above proposal has been accepted.

Committee Chair: \_\_\_\_\_ Date \_\_\_\_\_

Committee Member: \_\_\_\_\_ Date \_\_\_\_\_

Committee Member: \_\_\_\_\_ Date \_\_\_\_\_

Graduate Studies Coordinator: \_\_\_\_\_ Date \_\_\_\_\_