**Proposal for <Title of Proposed Project>**

GIS 691

University of Redlands, Redlands, California

<Student Name>

Cohort <Number>

<Date>

PROPOSAL APPROVAL

The proposal contained herein has been submitted to University of Redlands MS GIS program as a component of the GIS 691 course, in consideration of the program’s degree requirement for a Major Individual Project (MIP).

This proposal has been reviewed by the undersigned MS GIS Program faculty, and has been found to be acceptable for continued project development in accordance with the MS GIS program’s guidelines for completion of a “professional-style” GIS consulting project.

|  |  |  |
| --- | --- | --- |
| STUDENT NAME | COHORT | DATE (mm/dd/yyyy) |
| TITLE OF PROPOSED PROJECT | | |
| CLIENT ORGANIZATION | CLIENT NAME | CONTACT PHONE |
| WILL THE CLIENT PROVIDE DATA FOR THIS PROJECT? (indicate none, some, or all, and explain) | | |
| WHAT PRODUCTS OR DELIVERABLES IS THE CLIENT EXPECTING? (to be written by student) | | |
| CLIENT SIGNATURE(1) | | DATE |
| APPLICANT (STUDENT) SIGNATURE | | DATE |
| MS GIS FACULTY SIGNATURE | | DATE |
| MS GIS FACULTY SIGNATURE | | DATE |
| MS GIS FACULTY SIGNATURE | | DATE |
| DESCRIPTION OF ANY REVISIONS TO PROJECT (summarize changes, refer to text, or indicate "none") | | |
| ASSIGNMENT OF STUDENT TO ADVISOR (to be signed and dated by faculty member indicating agreement to advise this student and this project) | | |

(1) (Note to client: This is a non-binding agreement. It is simply intended to acknowledge your willingness to participate, to provide data when you can, and to provide occasional guidance.)

ABSTRACT

A Proposal for <Title of Project>

By

<Name of Student>

An abstract is a self-contained, summary description of a paper (or in this case, a proposal). An abstract must succinctly and concisely encapsulate all the salient points of the paper, including the Problem Statement, the Approach, the Results, and the Conclusions, without being excessively wordy. It should leave the reader with a clear understanding of your paper, while at the same time enticing them to want to read the full text. Most professional journals will generally limit the length of abstracts to 150 or 200 words.

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# 1.0 Introduction

The purpose of the Major Individual Project (MIP) proposal is to clearly articulate your project problem and to recommend a solution for solving the problem that fits within the timeframe and degree requirements of the MS GIS program (University of Redlands, 2009). In the Introduction section, you should discuss the background for the problem (Section 1.1), demonstrate that you have sufficiently explored prior research and possible existing solutions for your problem before launching off on your own (Section 1.2), and provide evidence that you clearly understand the problem as it needs to be solved (Section 1.3). You should also introduce the client who will be sponsoring your project, and describe their anticipated role in the project (Section 1.4)

## 1.1 Background

The Background section is where you explain the general context for your problem, describe the circumstances for what created the problem, illustrate why the problem is worth solving within a GIS framework, and clarify the spatial components of the problem. You should also define basic terms as you introduce them.

## 1.2 Client

To accentuate the project experience, students are required to solicit the support of a sponsor for their projects who will act in the capacity of a “client.” The client does *not* have the same responsibilities as an academic advisor, whose primary purpose is to mentor students in the development of their academic curriculum; rather, the University asks that they assume a role similar to that of a technical point-of-contact. (Although it is permissible for an advisor or other faculty to also function as the student’s client, the students are strongly encouraged to look for sponsors outside of the MS GIS program.) This section should introduce the project sponsor and outline the responsibilities of the client in supporting your project.

## 1.3 Statement of the Problem

The primary requirement for a major individual project (MIP) is that you identify a problem that has a significant spatial component, and that would be interesting to solve using GIS. In this section you need to make sure that you express your project idea as a problem that has a geographic (spatial) context. It needs to be a problem that someone would like to have solved, or, at a minimum, a problem whose solution would have benefits for someone and which has a likelihood of being implemented. In making your problem statement you should first establish a context for the problem, that is, explain why this problem is important. You should be certain to explain how the client will assist you in defining the scope, function, and overall purpose of the project.

## 1.4 Previous Work

In this section you place your problem in an application domain(s) (e.g., transportation, environmental science), cite relevant examples from the academic and professional literature, and discuss approaches that have been used or could be used to solve the problem. These solutions may be from the particular domain you have identified for your problem, an approach from another domain that may not have been tried, and may include both GIS and non-GIS solutions.

A good literature review should establish for the reader how this problem fits into a broader field and identify relevant examples to the problem context and solution. The review should set up the solution that you will propose in Section 2 by building from the general problem domain to increasingly specific approaches to the problem. Include in your discussion issues surrounding the methods, particularly those that will have an impact on what method you plan to implement.

# 2.0 Proposed Solution

This section should outline the solution you intend to pursue and make clear why this solution is the appropriate one for you. Your proposed solution should logically follow from your introduction of the problem (Section 1.3), client expectations (Section 1.4), and the relevant solutions that you reviewed (Section 1.2).

## 2.1 Goals and Objectives

This section should explain what you will create to solve the problem, with a particular emphasis on the GIS components of your solution. You should also describe the proposed project outcome (to the extent that you know them at this point), and explain what you will produce during the period of your proposed project.

This would also be a good opportunity to explain why *you* want to do this project. Are there strategic benefits and opportunities, such as spin-off work and/or relationships, that you hope to achieve as a result of this project? What is your strategy for bringing these opportunities to fruition? In other words, what do *you personally* hope to accomplish by completing this major, individual, graduate-level project?

## 2.2 Scope

In this section you should outline a plan that establishes the project scope for solving the problem with a technical solution. (In real-world projects you would normally be required to estimate schedule and budget, as well, but you probably won’t have enough information yet to include these elements.) To the extent that you know them at this point, however, you should make an effort to define the overall project work effort and describe the major technical components of the proposed solution, such as hardware, software, applications, and data.

You should also describe the overall responsibilities of your client and yourself. You should establish boundaries on the project that define what the project will and won’t accomplish (i.e., explain any anticipated limits of your project). In general, the Scope section provides a definition and technical description of what will be produced by the project and delivered to the client. Therefore, it should describe the overall work effort you expect will be needed to successfully accomplish the project.

## 2.3 Methodologies

In the Methodologies section you should explain the general steps you will take to produce your objectives, and state what you will need to do to either create or achieve those objectives. One way of doing this is to provide a detailed breakdown of tasks and activities for the project (called a Scope of Work), along with a detailed process flow diagram. This Scope of Work would typically outline the tasks, subtasks, activities, and other actions necessary for successfully completing the project, and would show the relationships among the tasks and activities in terms of chronology, dependencies, and critical path.

However, it is unlikely that you will know this level of detail at this point in the project development process (we will study this in much greater detail in GIS 692). For the purpose of this proposal, you should at least make an attempt to describe the general methodologies you expect to employ to complete the project successfully, and summarize your overall philosophy for ensuring the successful completion of the technical program.

# 3.0 Summary

In the Summary section you should restate and summarize the main concepts of your proposal as introduced in the Introduction section (i.e., clearly articulate your project problem and reiterate the main points of your solution for the problem, such that it fits within the timeframe and degree requirements of the MS GIS program). Ideally your summary write-up should confirm the potential value of the project to the reader; reemphasize the necessity, feasibility, and usefulness of the solution; and explain the expected benefit of the project to the GIS community.

# 4.0 References

You will be expected to cite all your sources. For reference citations, the MS GIS program follows the guidelines as set forth in the APA Publication Manual (APA, 2001) or Style Guide (APA 2005).

APA. (2001). *The Publication Manual of the American Psychological Association* (5th ed.). Washington, D.C.: American Psychological Association.

APA. (2005). *Concise Rules of APA Style* (First ed.). Washington, D.C.: American Psychological Association.

University of Redlands. (2009). *Degree Requirements*. Retrieved 1/13/2009, from http://www.spatial.redlands.edu/msgis/courses/course-offerings.aspx