

Project Title (Due March 9)

Junior Project Proposal - ECE 394A

March 18, 2019

Partners: Name1 LastName1
Name2 LastName2
Name3 LastName3
Name4 LastName4

Abstract

Briefly describe the proposed project, design procedure, and key elements/parts. The project must be implemented using basic analog elements such as transistors and opamps. Dedicated ICs should not be used unless it is necessary and in a limited manner (the majority of the project should only contain basic elements). Each group may have a minimum of two and a maximum of four students. You may choose your own project. The scope and complexity should reflect the number of students in the group. The following are some ideas:

- Analog Synthesizer
- Audio amplifier
- Low frequency receiver
- Theremine
- Noise cancelation and isolation device

Point out, when possible, your attempt to enhance performance and mitigate cost and other potential tradeoffs.

Introduction

In one paragraph, provide a general description of the over all objective and what stimulated your interest in choosing the specific project.

In one paragraph, provide some background. This may include (if applicable) a brief history on the project's most basic initial implementation and how it evolved to the most modern implementation and its applications.

Discuss how the rest of the document is organized or how you are presenting the information.

Project Description

Provide a detailed description of the project. You may breakdown the project into several elements/parts each of which you will describe in more detail in the procedure. Include a block-diagram that is consistent with your description. Clearly state the specifications and performance objectives and explain how you are planning on meeting such requirements.

NOTE: Make sure that every figure has a descriptive caption and it is referred to properly from within the text. Make sure that your document is well cited. There is no such thing as too many references.

Design and Implementation Procedure

For each part within the project perform the following:

Title- Part xx

Here, provide a schematics of the circuit you are proposing to implement with projected component values, a description of what the circuit does, its role in the overall picture, how it works, and the purpose of this part of the project. Mention your expectations based on theoretical analysis (when possible).

| | Components | |
|---------------------------|------------|--|
| List of Components | | |

Title- Part xx

List of Components

Project Timeline

This is a preliminary plan. Include a timeline table describing how the work will be distributed throughout the semester until project completion.

Projected Expenses

In this section, provide an approximate cost for the implementation of the project. This should mainly include cost of all components even if they are

already available in the lab. Clearly indicate the parts that are not available.
Make sure to account for spare parts.

References