

# Title of your project

Your name

**Abstract**—Short description of your AA 290 project.

## I. INTRODUCTION

State here the general topic of your AA 290 project.

### A. Literature

Provide here a thorough literature review for your problem (about 10-12 papers). I would like to see your judgment about each paper you cite (e.g., this paper does not address in an efficient way the case with...).

### B. Motivation of proposed work

In light of the previous literature review, explain why your project is important.

### C. Statement of work

State the objectives of your project at a general level.

## II. PROBLEM FORMULATION

Provide here a sound formulation of your problem. Also, describe here your objectives in a formal way.

## III. PROPOSED SOLUTION

## IV. SIMULATION/EXPERIMENTS

## V. CONCLUSIONS

### A. Conclusions

## APPENDIX — STYLE GUIDELINES

### B. Figures and Tables

Position figures and tables at the tops and bottoms of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table captions should be above the tables. Avoid placing figures and tables before their first mention in the text. Use the abbreviation “Fig. 1”, even at the beginning of a sentence. Figure axis labels are often a source of confusion. Try to use words rather than symbols. As an example write the quantity “Inductance”, or “Inductance L”, not just. Put units in parentheses. Do not label axes only with units. In the example, write “Inductance (mH)”, or “Inductance L (mH)”, not just “mH”. Do not label axes with the ratio of quantities and units. For example, write “Temperature (K)”, not “Temperature/K”.

### C. Numbering

Number reference citations consecutively in square brackets [?]. The sentence punctuation follows the brackets [?]. Refer simply to the reference number, as in [?]. Do not use “ref. [?]” or “reference [?]”. Number footnotes separately in superscripts<sup>1</sup> Place the actual footnote at the bottom of the column in which it is cited. Do not put footnotes in the reference list. Use letters for table footnotes (see Table I).

### D. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, CGS, ac, dc, and rms do not have to be defined. Do not use abbreviations in the title unless they are unavoidable.

### E. Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). To make your equations more compact you may use the solidus (/), the exp. function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than hyphen for a minus sign. Use parentheses to avoid ambiguities in the denominator. Punctuate equations with commas or periods when they are part of a sentence:

$$\Gamma_2 a^2 + \Gamma_3 a^3 + \Gamma_4 a^4 + \dots = \lambda \Lambda(x),$$

where  $\lambda$  is an auxiliary parameter.

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. Use “(1),” not “Eq. (1)” or “Equation (1),” except at the beginning of a sentence: “Equation (1) is ...”.

Fig. 1. Inductance of oscillation winding on amorphous magnetic core versus DC bias magnetic field