Author Guidelines for Project Report Writing

Hua Harry Li, Ph.D.
Computer Engineering Department, College of Engineering
San Jose State University, San Jose, CA 94303
E-mail: hualili@yahoo.com

Abstract

An abstract is one of the most important parts of the report. It should be written in a brief and factual manner with no more than 50 words, and very often one paragraph. It should give one sentence clear description of project, then the goal and objective(s), the motivation and/or the significance of the project. Then it should give one sentence of the main technical challenge(s), and how did you overcome this challenge/difficulty. Finally, one sentence gives the final result, most importantly indicate if the goal was accomplished.

1. Introduction

One or two paragraph gives the background information (provide references if needed, and list these reference in the Reference Section [1]) and provides further detailed information of the project goal and objective(s), technical challenges and /or difficulties, and brief description of how to approach and solve this challenge/difficulties.

2. Methodology

First give one or two sentences to point out what you want to provide to the reader in this section and how these material is organized. Then very often you want to cover the following subjects in this section.

2.1. Objectives and Technical Challenges

Give the detailed, very often are enumerated objectives which can be derived from the goal of the project, then describe briefly the corresponding technical challenges.

2.2. Problem Formulation and Design

Give the detailed, one-to-one correspondence description of your design to attach/solve the problem and to achieve the objectives and the goal of the project:

1. Use engineering language and mathematical formulation;
2. Provide system block diagrams and circuit schematics for your hardware design;
3. Give flow chart and pseudo code description for the step-by-step discussion of your software design.

3. Implementation

One sentence to describe the organization of this section, then provide detailed discussion on your implementation.

3.1. Hardware Design

Provide the following description and discussion:
1. System block diagram(s).
2. Schematic design.
3. Bill of material (list of components).

3.2. Software Design

Provide the following description and discussion:
1. Flow chart or flow charts, very often you should provide one top level flow chart, then additional flow charts for detailed lower level implementations.
2. Algorithm, e.g., description of the step by step implementation.
3. Pseudo code for each section of the implementation.

4. Testing and Verification

Provide testing and verification procedures to make sure quality control personnel, team members, supervisor can verify and reproduce the experimental result.

5. Conclusion

Provide summary of this project, briefly review the statements made in the abstract, in particular, if the enumerated objectives and goal are achieved. Emphasize and highlight the lessons learned, point out the direction for further improvement if needed.

6. Acknowledgement

Provide acknowledgement if needed, such as support, help, or assistance from someone. These support, help, assistance are crucial.

7. References

[1] H. Li, "Author Guidelines for CMPE 146/242 Project Report", *Lecture Notes of CMPE 146/242*, Computer Engineering Department, College of Engineering, San Jose State University, March 6, 2006, pp. 1.

8. Appendix

Diagrams, source code listing, circuit schematics, relevant datasheets etc. go here.