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CONVEX OPTIMIZATION FOR HOLISTIC MECHATRONIC SYSTEM DESIGN

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ABSTRACT

This article illustrates preparation of ASME paper using LaTeX2ε. An abstract for an ASME paper should be less than 150 words and is normally in italics.

NOMENCLATURE

A   You may include nomenclature here.
α There are two arguments for each entry of the nomemclature environment, the symbol and the definition.

The spacing between abstract and the text heading is two line spaces. The primary text heading is boldface in all capitals, flushed left with the left margin. The spacing between the text and the heading is also two line spaces.

INTRODUCTION

Introdoc...

Equations

1

$$f(t) = \int_{0_+}^{t} F(t)dt + \frac{dg(t)}{dt} \qquad (1)$$

Figures

1

FIGURE 1. THE FIGURE CAPTION USES CAPITAL LETTERS.

TABLE 1. THE TABLE CAPTION USES CAPITAL LETTERS, TOO.

Example	Time	Cost
1	12.5	$1,000
2	24	$2,000

Tables

1

CITING REFERENCES

The ASME reference format is defined in the authors kit provided by the ASME. The format is:

Text Citation. Within the text, references should be cited in numerical order according to their order of appearance. The numbered reference citation should be enclosed in brackets.

The references must appear in the paper in the order that they were cited. In addition, multiple citations (3 or more in the same brackets) must appear as a " [1-3]". A complete definition of the ASME reference format can be found in the ASME manual [**?**].

The bibliography style required by the ASME is unsorted with entries appearing in the order in which the citations appear. If that were the only specification, the standard BIBTEX unsrt bibliography style could be used. Unfortunately, the bibliography style required by the ASME has additional requirements (last name followed by first name, periodical volume in boldface, periodical number inside parentheses, etc.) that are not part of the unsrt style. Therefore, to get ASME bibliography formatting, you must use the `asmems4.bst` bibliography style file with BIBTEX. This file is not part of the standard BibTeX distribution so you'll need to place the file someplace where LaTeX can find it (one possibility is in the same location as the file being typeset).

With LATEX/BIBTEX, LATEX uses the citation format set by the class file and writes the citation information into the .aux file associated with the LATEX source. BIBTEX reads the .aux file and matches the citations to the entries in the bibliographic data base file specified in the LATEX source file by the `\bibliography` command. BIBTEX then writes the bibliography in accordance with the rules in the bibliography .bst style file to a .bbl file which LATEX merges with the source text. A good description of the use of BIBTEX can be found in [**?, ?**] (see how 2 references are handled?). The following is an example of how three or more references [?, ?, ?] show up using the `asmems4.bst` bibliography style file in conjunction with the `asme2e.cls` class file. Here are some more [**?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?**] which can be used to describe almost any sort of reference.

of the article to the very end as shown in the following example.

$$a = b + c. \tag{2}$$

ACKNOWLEDGMENT

Thanks go to D. E. Knuth and L. Lamport for developing the wonderful word processing software packages TEX and LATEX. I also would like to thank Ken Sprott, Kirk van Katwyk, and Matt Campbell for fixing bugs in the ASME style file `asme2e.cls`, and Geoff Shiflett for creating ASME bibliography stype file `asmems4.bst`.

Appendix A: Head of First Appendix

Avoid Appendices if possible.

Appendix B: Head of Second Appendix
Subsection head in appendix

The equation counter is not reset in an appendix and the numbers will follow one continual sequence from the beginning