機器人動力與控制 期末報告

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摘要

Begin the abstract two lines below author names and addresses. The abstract summarizes key findings in the paper. It is a paragraph of 250 words or less. For the **keywords**, select up to 8 key terms for a search on your manuscript's subject.

**Keywords:** Times Roman, image area, acronyms, references

# 介紹

Begin the Introduction two lines below the Keywords. The manuscript should not have headers, footers, or page numbers. It should be in a one-column format. References are often noted in the text1 and cited at the end of the paper.

## Background

If the paper does not have the margins shown in Table 1, it will not upload properly.

Table 1. Margins and print area specifications.

**PAPER MARGINS**

A4 Letter

Top margin 2.54 cm  *(1in.)* Top margin 1.0 in.  *(2.54 cm)*

Bottom margin 4.94 cm *(1.95 in.)* Bottom margin 1.25 in. *(3.17 cm)*

Left, right margin 1.925 cm *(.76 in.)* Left, right margin .875 in.  *(2.22 cm)*

Printable area--all text, figures and footnotes:   
A4: 17.15×22.23 cm Letter : 6.75×8.75 in.

## Definition of problem

Table 2 shows the font sizes and highlighting in a typical manuscript. These font "styles" are contained with this sample manuscript and Section 4 below explains how to use them. Use Times Roman or another standard font to avoid font errors.

## Objective of the project

You should mention the user specifications and technical specifications in this section,

Table 2. Manuscript font sizes and formatting. This Microsoft Word template includes these formats as automated "styles", which can be selected in the Format menu -- Styles and Formatting. (9pt)

## Preformatted SPIE Template Styles

## *Manuscript component Description*

## SPIE paper title 16 pt. bold, center

## SPIE authors/affiliations 12 pt., center

**Keywords:** \*Keywords\* 10 pt., left justify

### SPIE ABSTRACT TITLE 11 pt. BOLD, center

SPIE abstract body text 10 pt., justify

### SPIE SECTION HEADING 11 pt. BOLD, center, whole numbers

**1.1 Heading 2, SPIE subsection heading 10 pt. bold, left justify, subsection numbers**

SPIE body text 10 pt., justify

SPIE figure caption 9 pt., justify below figure

SPIE table caption 9 pt., justify above figure

SPIE footnote text 9 pt., justify, numbered

**REFERENCE HEADING 11 pt. BOLD, center**

1. SPIE reference listing 10 pt., justify, numbered in brackets

# 材料與方法

## System schematics

Center the paper title at the top of the page in 16-pt. bold. Only the first word, proper nouns, and acronyms are capitalized. Keep titles brief and descriptive. Spell out acronyms unless they are widely known. Avoid starting with articles or prepositions, e.g., “The study of … ,” or, “On the ….”

## System analysis

The author list is in 12-pt. regular, centered. Omit titles and degrees such as Dr., Prof., Ph.D., etc. The list of affiliations follows. Each author's affiliation should be clearly noted.

## System description

Section headings are 11-pt. bold capitals, centered. Sections numbers have whole numbers, e.g., 1, 2, 3… Don't number the "Acknowledgements" and "References." Headings often used are: 1. Introduction, 2. Methodology, 3. Data, 4. Results, and 5. Conclusions**.**

## Subsection heading

Subsection headings are left-justified, 10-pt. bold. Capitalize the first word, acronyms, and proper nouns.

## Paragraphs

Add a blank line above and below section headings and between paragraphs. Avoid headings or one-line paragraphs at the top or bottom of a page by using page breaks or extra blank lines. One method to preserve page breaks is to make the bottom margin a little larger than the specifications. Indentation is optional. This spacing is automatic if you are using the SPIE "section" styles in Word.

## Text

Text is 10 point and justified. Each sentence ends with a period and a single space before the next sentence.

## Figures and captions

Figures are centered. Use or insert .jpg, .tiff, or .gif illustrations instead of PowerPoint or graphic constructions. Captions go below figures. Indent 5 spaces from left margin and justify.



Figure 1. Figure captions are indented 5 spaces and justified. If you are familiar with Word styles, you can insert a field code called Seq figure which automatically numbers your figures.

## Tables and captions

Tables are centered. The caption goes above the table. The caption text should indent 5 spaces from left margin and justify. Table examples are on page 1 and 2 and below.

# 結果與討論

Video and audio files can be included for publication. Table 3 lists the specifications for the mulitimedia files. Use a screenshot or another .jpg illustration for placement in the text. Use the file name to begin the caption. The text of the caption must end with the text "<http://dx.doi.org/doi.number.goes.here>" which tells the SPIE editor where to insert the hyperlink in the digital version of the manuscript.

Here is a sample illustration and caption for a multimedia file:



Video 2. A label of “Video/Audio 1, 2, …” should appear at the beginning of the caption to indicate to which multimedia file it is linked . Include this text at the end of the caption: <http://dx.doi.org/doi.number.goes.here>

Table 3. Information on video and audio files that can accompany a manuscript submission.

|  |  |  |
| --- | --- | --- |
| **Item** | **Video** | **Audio** |
| File name | Video1, video2, … | Audio1, audio2, … |
| Number of files | 0-10 | 0-10 |
| Size of each file | max. 5 mb | max. 5mb |
| File types accepted | .mpeg, .mov (Quicktime), .wmv (Windows Media Player) | .wav, .mp3 |

# 結論

Use common fonts like Times Roman in your math equations. A math reference in a paragraph sentence such as  is not numbered. The steps of a mathematical argument can be numbered using a right-aligned tab for clarity, for example

α =  (1)

and

*ρ*=. (2)

# using THIS TEMPLATE AND ITS Automatic formatting

This document template and more information is available on SPIE.org:

<http://spie.org/x14101.xml> or by emailing [authorhelp@spie.org](mailto:authorhelp@spie.org)

## View the pre-formatted styles

To see the formats available with this manuscript, go to the Format menu and choose "Styles and Formatting". To view which style is being used in any part of this document, place your cursor on the line and look in the Styles and Formatting display.

## Using SPIE styles

To use this template in Microsoft Word: open this file and save it to a new file name. Type over the existing text with your paper. Alternately, you can delete all text, and select the SPIE style for each paragraph from the Styles and Formatting menu.

## Notes on SPIE styles

The styles listed in Table 2 automatically add extra spacing before and/or after paragraphs: SPIE title, SPIE authors-affiliations, SPIE section heading, SPIE subsection heading, and SPIE body text. The 1.1 Heading 2 style automatically goes into the body text style after one paragraph return.

參考文獻

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