

# Big Data for Edge Computing

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## ABSTRACT

This paper provides a sample of a  $\LaTeX$  document which conforms, somewhat loosely, to the formatting guidelines for ACM SIG Proceedings.

## KEYWORDS

Big Data, Edge Computing i523

## 1 ORGANIZATION

This sample has some advanced features that may not be offered by other  $\LaTeX$  frameworks. All of these features are accessible at this time through a makefile. These advanced features are optional and introduce a number of automated tests for the document. Such tests are executed through a Makefile. Such makefiles can be executed on Linux or OSX. They are not available on sharelatex. We are not aware if they can be executed on Windows.

The document is organized in a repository, that needs to be replicated into your computer. Please be mindful about the capitalization. We only use lower case for any file in our directory and we never use spaces or non ASCII characters.

We have the following files:

```
format/submission.tex
format/final.tex
content.tex
report.tex
report.bib
```

We separated the content from the report format into two different files, as we found that students in the past manipulated our format to circumvent our page limitation and artificially manipulated spacing and other unnecessary things that we from now on consider as cheating. Thus we like you not to modify the report.tex file at all and if you have improvement suggestions to discuss them with us. These improvements will then be integrated first into this document so they are available to all students. Only after they are integrated, you may use them in your report.

Thus the only file you are allowed to modify is the content.tex file and the report.bib bibliography files.

Images and tables are supposed to be placed in floats. You can place them with `[htb]` at any place in the document. However, we will for the submission force the placement at the end of the document. Please keep in mind that tables and figures and programs that are also to be placed in figures do not count towards the paper length.

## 2 INTRODUCTION

Put here an introduction about your topic. We just need one sample reference so the paper compiles in LaTeX so we put it here [1].

## 3 FIGURES

In Figure 1 we show a fly. Please note that because we use just columnwidth that the size of the figure will change to the columnwidth of the paper once we change the layout to final. Changing the layout to final should not be done by you. All figures will be listed at the end. Please do not use phrases such as as shown in the figure below.

[Figure 1 about here.]

When copying the example, please do not check in the images from the examples into your images directory as you will not need them for your paper. Instead use images that you like to include. If you do not have any images, do not create the images folder.

## 4 TABLES

In case you need to create tables, you can do this with online tools (if you do not mind sharing your data) such as <https://www.tablesgenerator.com/> or other such tools (please google for them). They even allow you to manage tables as CSV.

or generate them by hand while using the provided template in Table ?? . Note that the caption is before the tabular environment.

[Table 1 about here.]

## 5 QUOTES

Do not use "these quotes" but use these "these quotes".

## 6 LABELS

Do not use Figure 1 user the ref for the figure while using its label

## 7 FOOTNOTES

Footnotes must be avoided in papers. All URLs must be included as full references and citations and used with the `\cite` command <sup>1</sup>.

## 8 LONG EXAMPLE

If you like to see a more elaborate example, please look at report-long.tex.

## 9 PLAGIARISM

The class includes a section about plagiarism which you must adhere to. Copying text without proper citation is considered cheating and we will assign the grade "F" for the paper. It is in your responsibility

<sup>1</sup>do not use footnotes

to make sure plagiarism does not occur. Please be aware that our checks are better than the once provided by turnitin or other online checkers. Excuses such as “I did not have time” or “I forgot” can not apply as you must have enough time and must not forget.

## 10 CONCLUSION

Put here an conclusion. Conclusion and abstracts must not have any citations in the section.

## ACKNOWLEDGMENTS

The authors would like to thank Dr. Gregor von Laszewski for his support and suggestions to write this paper.

## REFERENCES

- [1] Ian Editor (Ed.). 2007. *The title of book one* (1st. ed.). The name of the series one, Vol. 9. University of Chicago Press, Chicago. <https://doi.org/10.1007/3-540-09237-4>

We include an appendix with common issues that we see when students submit papers. One particular important issue is not to use the underscore in bibtex labels. Sharelatex allows this, but the proceedings script we have does not allow this.

When you submit the paper you need to address each of the items in the issues.tex file and verify that you have done them. Please do this only at the end once you have finished writing the paper. To d this change TODO with DONE. However if you check something on with DONE, but we find you actually have not executed it correctly, you will receive point deductions. Thus it is important to do this correctly and not just 5 minutes before the deadline. It is better to do a late submission than doing the check in haste.

## A ISSUES

DONE:

Example of done item: Once you fix an item, change TODO to DONE

### A.1 Assignment Submission Issues

Do not make changes to your paper during grading, when your repository should be frozen.

### A.2 Uncaught Bibliography Errors

Missing bibliography file generated by JabRef

Bibtex labels cannot have any spaces, \_ or & in it

Citations in text showing as [?]: this means either your report.bib is not up-to-date or there is a spelling error in the label of the item you want to cite, either in report.bib or in report.tex

### A.3 Formatting

Incorrect number of keywords or HID and i523 not included in the keywords

Other formatting issues

## A.4 Writing Errors

Errors in title, e.g. capitalization

Spelling errors

Are you using *a* and *the* properly?

Short form of verbs is for spoken language. Do not use them in scientific writing. example: can't is incorrect, use cannot

Do not use phrases such as *shown in the Figure below*. Instead, use *as shown in Figure 3*, when referring to the 3rd figure

Do not use the word *I* instead use *we* even if you are the sole author

Do not use the phrase *In this paper/report we show* instead use *We show*. It is not important if this is a paper or a report and does not need to be mentioned

If you want to say *and* do not use *&* but use the word *and*

Use a space after . , :

When using a section command, the section title is not written in all-caps as format does this for you

\section{Introduction} and NOT \section{INTRODUCTION}

## A.5 Citation Issues and Plagiarism

It is your responsibility to make sure no plagiarism occurs. The instructions and resources were given in the class

Claims made without citations provided

Need to paraphrase long quotations (whole sentences or longer)

Need to quote directly cited material. Are you sure you have quoted all of them?

The citation mark should not be in the beginning of the sentence or paragraph, but in the end, before the period mark. example: ... a library called Message Passing Interface(MPI) [7].

Put a space between the citation mark and the previous word

## A.6 Character Errors

Erroneous use of quotation marks, i.e. use “quotes” , instead of ” ”

To emphasize a word, use *emphasize* and not “quote”

When using the characters & # % \_ put a backslash before them so that they show up correctly

Pasting and copying from the Web often results in non-ASCII characters to be used in your text, please remove them and replace accordingly. This is the case for quotes, dashes and all the other special characters.

If you see a ffigure and not a figure in text you copied from a text that has the fi combined as a single character

## A.7 Structural Issues

Acknowledgement section missing

Incorrect README file

In case of a class and if you do a multi-author paper, you need to add an appendix describing who did what in the paper

The paper has less than 2 pages of text, i.e. excluding images, tables and figures

The paper has more than 6 pages of text, i.e. excluding images, tables and figures

Do not artificially inflate your paper if you are below the page limit

## A.8 Details about the Figures and Tables

Capitalization errors in referring to captions, e.g. Figure 1, Table 2

Do use *label* and *ref* to automatically create figure numbers

Wrong placement of figure caption. They should be on the bottom of the figure

Wrong placement of table caption. They should be on the top of the table

Images submitted incorrectly. They should be in native format, e.g. .graffle, .pptx, .png, .jpg

Do not submit eps images. Instead, convert them to PDF

The image files must be in a single directory named "images"

In case there is a powerpoint in the submission, the image must be exported as PDF

Make the figures large enough so we can read the details. If needed make the figure over two columns

Do not worry about the figure placement if they are at a different location than you think. Figures are allowed to float. For this class, you should place all figures at the end of the report.

In case you copied a figure from another paper you need to ask for copyright permission. In case of a class paper, you must include a reference to the original in the caption

Remove any figure that is not referred to explicitly in the text (As shown in Figure ..)

Do not use `textwidth` as a parameter for `includegraphics`

Figures should be reasonably sized and often you just need to add `columnwidth`

e.g.

```
/includegraphics[width=\columnwidth]{images/myimage.pdf}
```

## LIST OF FIGURES

1 Example caption

5



Figure 1: Example caption

LIST OF TABLES

1	My caption	7
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**Table 1: My caption**

1	2	3
4	5	6
7	8	9