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

hid000, use up to 5 keywords

1 ORGANIZATION

The instructions are available at

https://github.com/cloudmesh-community/hid-sample/blob/master/paper-instructions.md

It will bring you to a link allowing you to easily download the PDF version of the instructions. The PDF document is located at

https://github.com/cloudmesh-community/hid-sample/raw/master/paper-instructions.pdf

The template is located at

https://github.com/cloudmesh-community/hid-sample/tree/master/paper

This sample has some advanced features that may not be offered by other LaTeX frameworks. All of these features are accessible at this time throug 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. As we have taught you how to set up a Linux system in class it is part of the leraning experience that you use that to verify the correctness of your paper. Alternatively you can set up a docker container and use that. It will be your responsibility to create such a container or set up the Linux environment with a *full* version of LaTeX and biber installed.

The document is organized in a a repository, that needs to be replicated into your github repository. **Please make sure that all filenames and directory names but a README.md are all lower case and have no underscore in it. Please make sure they do not contain a space in the filename.** We repeat again: Be mindful about the capitalization of filenames and directory names. We only use lower case for any file in our directory and we never use spaces or non ASCI characters.

IN order for you to most easily compile the paper you will also need to check out the directory hid-sample that includes the formats.

Your recommended directories should look like

```
~/github/cloudmesh-community/hid-samle
~/github/cloudmesh-community/hid-sp18-000
```

where 000 the number part of your hid. The two hid directories are cloned from github. We taught you how to do this and it is a class goal that you know how to do it.

In your hid folder you will find, once it is set up the following directory and files:

We have the following files that you will modify:

```
paper/content.tex
paper/report.tex
paper/report.bib
images/README.md
```

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 increased spacing and other unnecessary things that we would consider as cheating. If you

Thus the only file you are allowed to modify is the content.tex file and the report.bib bibliography file and the images directory in which you place your images.

Within the text, images and tables are **must** be placed in floats as discussed in the handbook. 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. You do not have to place them at the end. Please keep in mind that tables and figurs and programs that are also to be placed in figures do not count towards the paper length. Please also be reminded this is not a presentation and that lengthy enumerations will lead to point deductions. IN case of questions, consult with the TAs.

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 [**?**].

3 FIGURES

In Figure 1 we show a fly. Please note that because we use just columwidth 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 *shown in the figure below*. Instead use such as shown in Figure 1.

[Figure 1 about here.]

To avoid copying the example figure in each hid directory, we actually import it from the hid-sample directory. Lets assume you have a figure in the image directory called myfigure.pdf. You can than replace the line in the example with

```
\centering\includegraphics[width=\columnwidth]{images/myfigure.pdf
```

In case you use png than you must have a png that is at least 300dpi (find out what that means and how to do that) and use

```
\centering\includegraphics[width=\columnwidth]{images/myotherfigure.png}
```

When modifying 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 palce anything in the images folder. However most technologies could benefit for one image. Make sure you do not plagiarize the image. Find out from the hand book how to do that. Any plagiarism of images will result that we return the paper without review as you have not understood how plagiarism works.

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 double quotes " but use LaTeX “quotes”. Quotes **MUST** not be used to highlight works. Quotes are **STRICTLY** used for quoting text from sources with citation following. If we find a quote that is not followed by a citation we will return the paper without review.

6 LABELS

Do not use actual numbers in the taxt after you write for example Figure 1 use the ref for the figure while using its label. In our example it is Figure 1 and Table Figure 1. See the source for the example.

7 FOOTNOTES

Footnotes must be avoided in papers. All URLs must be included as full references and citations and used with the `\cite` command [1]. You **must** not use urls in the text or paper.

8 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 if we find you do it. It is in your responsibility 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 have enough time to prepare the paper and must not forget.

9 CHECK

make sure just as in previous assignments that you check your paper with chktex and lacheck. Fix the errors that you see. Some of the errors may be ok, but in general make sure you address all of them. If in doubt work with the TA. Simply use

```
make check
```

We include in the handbook a list with common issues that we see when students submit papers. One particular important issue is not to use the underscore in bibtex labels. It is your responsibility to check the paper for the issues indicated.

To check bibliographies simply use

```
pdflatex report
bibtex report
```

You will see the errors and warning son the screen address them

TA’s will in addition use a special test checking for additional format issues such as detecting if you used labels and refs for floats. You are welcome to also try this test, but we provide it without explanation as no explanation is needed since if you followed the instructions on floats there should be no issues. If you like to do that test, you can use

```
make check-ta
```

10 CONVENIENT SETUP

If you do not have already a paper dir in your repository, here is a way to create one. Replace the hid-sp18-000 with your hid.

```
export HID=hid-sp18-000
mkdir -p ~/github/cloudmesh-community
cd ~/github/cloudmesh-community
git clone https://github.com/cloudmesh-community/hid-sample.git
git clone https://github.com/cloudmesh-community/$HID.git
```

Next copy the paper example

```
cp -r hid-sample/paper $HID
cd $HID
git add paper
git commit -m "add the paper directory" paper
git push
```

Make sure there is no / behind the paper in the cp command or you mess up the copy process.

11 CREATING THE PDF

The PDF can be created simply with

```
make clean
```

UNDER NO CIRCUMSTANCES ARE YOU ALLOWED TO CHECK IN YOUR PDF OR TEMPORARY LATEX FILES INTO GITHUB. GIT NEEDS TO STAY CLEAN AND ONLY CONTAIN THE SOURCES.

We will deduct points if you do violate this.

12 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.

[1] do not use footnotes

REFERENCES

[] 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

List of Figures

1 Example caption 4

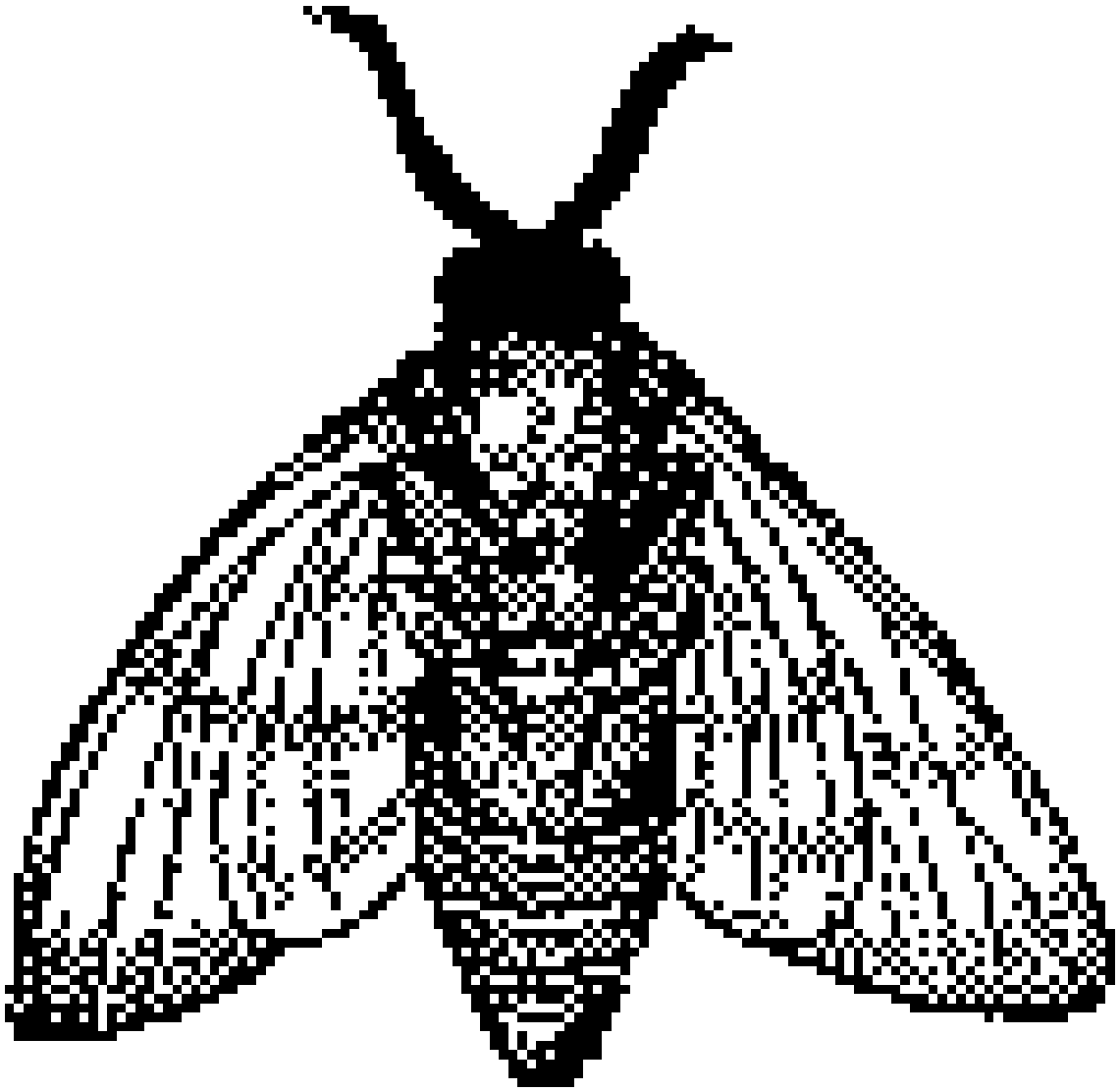

Figure 1: Example caption

List of Tables

1 My caption 6

Table 1: My caption

1	2	3
4	5	6
7	8	9