Coursework Report for Module INM433 “Visual Analytics”

Author’s Name

**Abstract**—Put here a brief summary of your work: analysis task, data, approach, main findings. Length: up to 200 words.

# Problem Statement

First paragraph...

Following paragraphs...

*<250 words*

# State of the Art

First paragraph...

Following paragraphs...

*<500 words*

# Properties of the Data

The data used for the following analysis is composed of two main components: first, the books of the LOTR trilogy, and second, additional demographic data on all characters of the LOTR universe. The text data was downloaded from a public GitHub repo that used [https://archive.org](https://archive.org/) and [www.ageofthering.com](http://www.ageofthering.com) to scrape this information from the web [1].

Each part of the LOTR trilogy is stored in a text file that includes the entire physical equivalent, from the title and contents to the footnotes at the very end. In total, the trilogy is about 470 thousand words.

# books / chapters

# unique word freqencies

# representation in pandas

# unstructured

Following paragraphs...

*<500 words, <=2 images*

# Analysis

## Approach

First paragraph...

Following paragraphs...

*<500 words, 1 diagram*

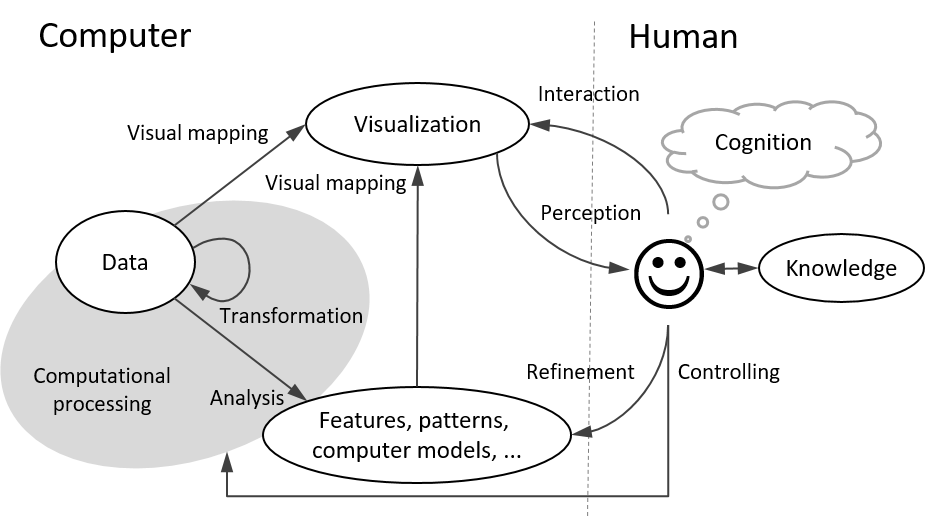


Fig. 1. An example of including a diagram in the document.

## Process

First paragraph...

Following paragraphs...

*<1500 words, <=7 images*

## Results

First paragraph...

Following paragraphs...

*<200 words, <=2 images*

# Critical reflection

First paragraph...

Following paragraphs...

*<500 words*

Table of word counts

|  |  |
| --- | --- |
| Problem statement | 250 |
| State of the art | 500 |
| Properties of the data | 500 |
| Analysis: Approach | 500 |
| Analysis: Process | 1500 |
| Analysis: Results | 200 |
| Critical reflection | 500 |

References

The list below provides examples of formatting references.

1. T. Gu, Lord\_of\_the\_ring\_project, (2018), GitHub repository, https://github.com/tianyigu/Lord\_of\_the\_ring\_project
2. M. Bögl, W. Aigner, P. Filzmoser, T. Lammarsch, S. Miksch, and A. Rind. Visual Analytics for Model Selection in Time Series Analysis, *IEEE Trans. Visualization and Computer Graphics*, 19(12): 2237-2246, 2013.
3. T.F. Cox, M.A.A. Cox. *Multidimensional Scaling*. Chapman and Hall, 2001.
4. S. van den Elzen and J.J. van Wijk. BaobabView: Interactive construction and analysis of decision trees, *Proc. IEEE Conf. Visual Analytics Science and Technology (VAST’11)*, pp. 151-160, 2011.
5. M.Harrower, C.A.Brewer: Colorbrewer.org: An online tool for selecting color schemes for maps. *The Cartographic Journal* 40(1): 27–37, 2003.
6. T. Mühlbacher and H. Piringer. A Partition-Based Framework for Building and Validating Regression Models, *IEEE Trans. Visualization and Computer Graphics*, 19(12): 1962-1971, 2013.
7. D. Phan, L. Xiao, R. Yeh, P. Hanrahan, T. Winograd. Flow map layout. In *Proceedings of the IEEE Symposium on Information Visualization (InfoVis 2005)*, pp.219-224, Oct. 2005.
8. J.W. Sammon. A nonlinear mapping for data structure analysis. IEEE Transactions on Computers, 18(5): 401–409, May 1969.
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10. N. Willems, H. van de Wetering, J.J. van Wijk. Visualization of vessel movements. *Computer Graphics Forum*, 28(3): 959-966, Jun. 2009.