

Brief guideline and tips for writing a scientific paper

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Abstract

The abstract should give the reader a clear picture of what the paper is about. It should include the purpose of the paper and even mention results of the study. The purpose of the abstract for readers is to determine if the paper covers things of interest for the reader. Instead of an abstract, business papers often include an executive summary.

1 Introduction

The introduction is important to set the stage of the work. This section should provide necessary background information, state the problem discussed in the paper, and describes the goal of the paper. The introduction typically outlines what research has been performed in this area and where there are unanswered questions for research. This section is usually more general than discussions in the main body of the paper. A short outline of the structure of the paper can be included when the paper is long and the author feels that some guidance is appropriate. Also, this section can include an outline of results so that the reader is prepared for the more detailed discussions in the main body of the text.

2 The main body of the text

2.1 The structure of text

The main body of the paper should be structured well to discuss all the issues that the author wants to communicate. It is generally a good idea to guide the reader with appropriate paragraphs, headings, and subheadings to structure the text.

Try to keep sentences short. Each paragraph should contain a single thought. Just think about a single message you want to convey within the paragraph and then concentrate on this thought.

2.2 Figures and tables

The text can include figures and tables. These elements should have captions attached to it which include enough detail to understand the figure without extensive reference to the text. Remember that axis and different lines in figures should be clearly labeled.

2.3 References

Referring to relevant literature clearly shows how mature the author is. It is very important to cite relevant work or sources used in the paper. This includes references to arguments that have been put forward in the literature, facts on which arguments in the paper are based, as well as links to further relevant information. Try to use reliable references. The citations often show how well the author is emersed in a field.

There are different citation styles in use such as using numbers in the text or footnotes. Some frequently used styles for Computer Science are described in "Computer Science Style Guide Suggestions" (2008). In this paper we follow the APA citation style (2008).

3 Conclusion and outlook

The main text should include already some discussion, but it is often a good idea to draw some more general conclusions and to provide some outlook. The conclusion can be a general discussion of how the work relates to other work, or it can mention what further steps should be taken to advance the field.

There are many good texts and tutorials for scientific writing. Communication is highly valued in science and industry, and some good written communication skills helps to advance in the field.

References

Computer Science Style Guide Suggestions (2008). Retrieved November 4, 2008, from http://news.ninemsn.com.au/health/story_13178.asp

APA style (2008). Retrieved November 4, 2008, from <http://apastyle.apa.org/>.