# Example paper

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Abstract—The abstract gives a brief overview of the main contribution of the paper. The important results in the paper should be front and centre here. Many people who arrive at your paper will only read the abstract, and those who do read it will likely decide to based on the abstract.

Index Terms—IEEE, IEEEtran, journal, Lagrange paper, template.

#### I. Introduction

The introduction to the paper should expand on the abstract, give the reader an idea of what you assume they already know, and inform them of the layout of the paper.

#### II. LITERATURE

Sometimes a review of the relevant literature in an area is included in the introduction, but it is no harm to put it in its own section. The paper overall should be full of references to other papers, but this is particularly the case for the literature section.

To find relevant literature, it's no harm to first have a general Google of the topic. However, you will eventually want to be systematic about it so that you don't have any obvious omissions of particularly relevant works. A good way to do this is to find a list of journals relevant to your topic, covering different publishers, decide on a list of search terms, and one-by-one search through the journals. For the papers that are returned, I recommend skimming the abstracts to determine whether the paper is worth reading. Then you must read them.

Following that, it's a good idea to keep an eye on collections like arXiv [1].

## III. MAIN SECTIONS

After the introduction and summary of the literature to date, you should start into the main contribution of your paper. How you organise that in sections is a matter of what kind of result it is. If you have run some experiments or your results are empirical, you might have a methodology section, followed by a results section.

However, not every paper will have a methodology section. If you are proving something outright, like showing that an algorithm has a certain property, you usually organise the sections in a bespoke manner suited to your result. You might, for instance, have an algorithm section describing the algorithm followed by a complexity section describing the computational complexity of the algorithm.

#### IV. CONCLUSION

The conclusion often just summarises what the paper has just said.

## REFERENCES

 Cornell University, "arXiv.org e-Print archive." https://arxiv.org.