

BRSU

Homework for Introduction to Scientific Working Assignment 6 Summary

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1 HOW TO READ A RESEARCH PAPER

The article "How to read a research paper" by Wes Huang deals with how to read a research paper.

In the beginning the author distinguishes the two kinds of papers the reader probably will read. Those are **conference papers** and **journal papers**. According to the author conference papers are rather short and have been published on a conference meeting, whereas journal papers are "more complete" papers that have been published in a journal.

The author then gives an overview over the main journals and conferences in robotics. For the searching of papers he gives some tools to use (like electronic library databases or cite-seer and scholar.google). When reading a paper the reader always has to keep some critical questions in mind regarding the paper he is reading, what problems the authors are solving, if they are really addressing the problem, is there any new contribution through their work and so on.

In the end the author gives some advice on the order one should read a paper. He suggests starting with the title, the abstract and the introduction, get the overall structure of the paper, move on to the conclusion and depending on the level of detail one is interested continue with the other parts.

2 HOW TO READ AN ENGINEERING RESEARCH PAPER

The article "how to read an engineering research paper" by William G. Griswold handles the way to read and understand engineering research papers. After a motivation on why reading and understanding a paper can sometimes be hard and why a structured approach is needed, the author first explains how a typical research paper is structured. He then asks some questions that every reader should ask himself while reading a paper. Those questions are questions about the motivation of the authors, the proposed solution, the evaluation, the reader's own analysis of the problem, the idea and the evaluation, about the contribution, the future directions of this research field, questions left and the take away message.

Afterwards the author of the paper advises the reader to take notes about and/or highlight certain parts of the paper and to also write down questions regarding the content.

In the last part of the paper the author suggests reading a paper always at least twice. Once for getting the big picture and the second time for trying to understand the details.