



Faculty of Science



Literature Study

A Structured Scientific Working Process

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Exercise 1

Why should one make a literature study?



Reasons for making a literature study

- To get an overview
 - Who did what when?
 - Classification/subclassing of others work
 - Are there any open problems (or caveats)?
 - What kind of results is out there?
- Learn the style and getting a feeling of it
 - Notation and terminology
 - What is common practice, style of communication etc..
- A tool to delimit ones problem
- Compare ones own work against others
- Document that one has done ones homework properly
- Serve as inspiration and help determine ones own novelty



Exercise 2

Who is the audience (target reader) of your literature study?



The Audience

- Censor and Examiner
- ...But they are peers!



Exercise 3

What types of litterature do there exist?



Litterature Types

- “Classical” journal papers
- Online journals
- Conference papers
- Workshop/Symposium papers
- Technical reports
- White papers
- Web pages
- Books
- and more...



Exercise 4

What characterizes high “quality”
litterature?

(Trick question – you may want to think about what we mean by quality?)



Characteristica of “Good” Literature

- Written by a “good” author (what does that mean?)
- Written by an author that has written works with other good authors.
- An author that has a “nice” affiliation (what is nice?)
- Many reviews
 - Double blinded, peer reviewed work – biased review process?
- Has many citations (is that really a good thing?)
- Has been published by a “thrustworthy” publisher



Exercise 5

Evaluate the quality of the different literature types

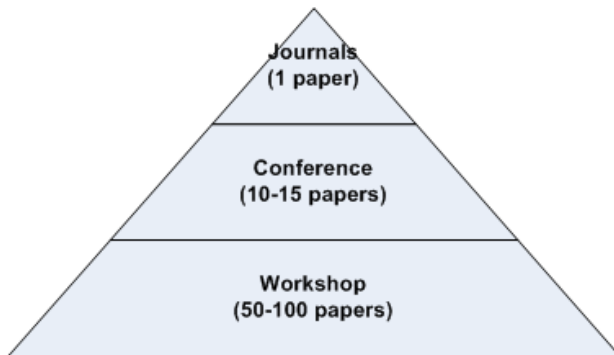


The Sparring Taxonomi

Type	Reviewers	Citater
Journal Papers	3-4 and up	Many
Online (Journal) Papers	?	Fewer
Conference Papers	2-3 and up	Fewer
Workshop/Symposia Papers	1 or 2 and up	Less than fewer
Technical Reports	None or 1	Less than fewer
White Papers	None	Less than fewer
Web pages	None	Close to none
Books	None	Many



The Spurring Paper Pyramid



Exercise 6

How does one find/get literature?



Literature Search Tools

- Do you know your university library?
 - Go read <http://www.diku.dk/bibliotek/>
- Try google author names and topics
- Google scholar is nice for chain searching (look for authors, topics, titles, references)
- ACM portal (another good place for chain search)
- Be “social” and do networking – talk to others that do the same thing



How do I read a Research Paper?

More on this later...



How do I create a list of literature work?

- By the end of your report you need to write a list of literature references
- Use a consistent layout and style – many standards exist, try have a look at bibtex
- Common practice is to have a cite syntax like author/year with refers to a corresponding entry in the reference list.
- Use tools that make this easy for you (latex and bibtex are very good at this)



What should a Reference Contain?

One needs to be explicit, detailed and consistent!

- Journal Papers: Authors, Paper Title, Journal name, Volume, Number, Pages, Year.
- Conference Papers: Authors, Paper Title, Conference name, Pages, Year.
- Books: Authors, Book Title, Edition, Publisher, Year.
- Web sources: Authors (if possible), Title, URL, Date of access, maybe a short note.



Exercise 7

What references should be in the list?



Works to Reference

- Only contain references you cite in your report.
- Only cite relevant references at appropriate places.
- There are two types of literatures
 - Those you cite in your report
 - Those you use to get inspiration for your project



Exercise 8

Read the handed out literature study example (10 minutes). Discuss the example. Reflect on whether it is a good or bad example.



Exercise 9

Write a literature study for your own project using (app. 3-5 references, max 1 page).

This is an incremental process

- Step 1: Write notes for the papers you read
- Step 2: Write the literature study in your own words



Exercise 10

Form groups and read each others literature studies. Then discuss

- Which are the good parts?
- Which parts can be improved?
- Identify what types of literature that is being used.
- Reflect on whether there are other obvious types of literature that should be included.



The Literature Graph – A mind map

- Create a node for each author name
- Create a node for each paper (paper title, year etc..)
- Create a node for author affiliations
- Create edges between co-authors
- Create edges between authors and affiliations
- Create edges between authors and papers
- Create edges between cites and references

Now

- Make sub graphs of “methods”
- Make sub graphs of “people”

