

Academic Skills in Computer Science (ASiCS)

Finding and Organizing Literature

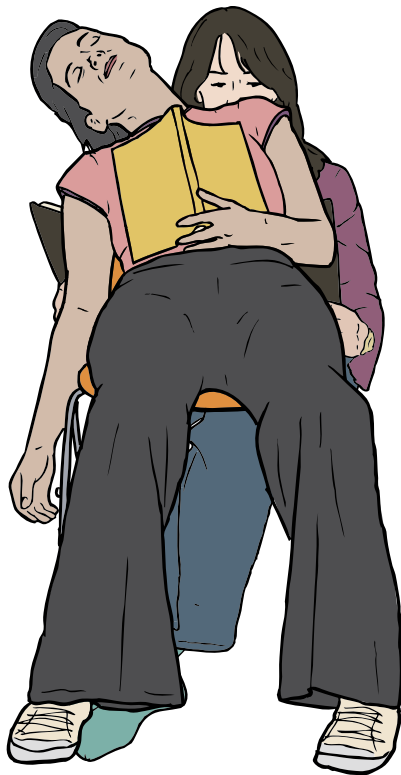
Exercise

Thursday, 6. DS, APB/E001

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Reading



Writing



Organizing



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- Includes the *problem definition* as crucial part
- Prepends a **background** of this research (*Why is it important?*)
- Summarizes the major **problems and goals**
- Appends a description of your evaluation (*success proof*)

Recurring structure of scientific papers in computer science

- Introduction / Motivation
- Background / Preliminaries / Contemporary Approaches
- Concept / Methodology
- Implementation / Realization
- Evaluation / Case Study / Illustration / Discussion
- Related work
- Conclusion / *Contributions*

Common Tasks



- Find relevant / related publications
 - Query scientific search engines
 - Look up *BibTex* for specific publications from the web
- Investigate found publications
 - Skim papers
 - Make notes and hints
 - Organize downloaded files
 - Maintain a corresponding **bibliography** of *BibTex* entries

A Small Survey

- Q1:What tools do you use to read and annotate papers?
- Q2:*What tools do you use to organize your bibliography?*
- Q3:*What tools do you use to organize stored papers?*

BibTex

```
@inproceedings{kuehn2015choosy,  
  title = {Choosy and picky: configuration of language product lines},  
  author = {K{\\"u}hn, Thomas and Cazzola, Walter and Olivares, Diego Mathias},  
  booktitle = {Proceedings of the 19th International Conference on Software  
                Product Line},  
  
  year = {2015},  
  organization = {ACM},  
  pages = {71--80},  
  citations = {1},  
  file = {:./Kuehn/Thomas Kuehn_Choosy and picky - configuration of language  
          product lines.pdf:PDF},  
  howpublished = {\url{http://dl.acm.org/citation.cfm?id=2791092}},  
  owner = {thomas},  
  timestamp = {2015.09.07}  
}
```

Finding Relevant / Related Publications

- Query scientific search engines
 - When looking for complex search terms
 - Google Scholar (free) <https://scholar.google.com>
 - Elsevier Scopus (registration) <https://www.scopus.com>
 - Academia (registration) <https://www.academia.edu>
 - Sci-Hub (illegal) <http://sci-hub. ...>
- Query publishers directly
 - For a specific journal or conference in computer science
 - IEEE Xplore <https://ieeexplore.ieee.org>
 - ACM Digital Library <https://dl.acm.org>
 - Springer Link <https://link.springer.com>
 - Elsevier ScienceDirect <https://www.sciencedirect.com>

Investigating Found Publications

- Use appropriate reader
 - Permit highlighting, comments, and annotations
 - *Xournal, Acrobat Reader, Foxit Reader, Mupdf, ...*
- Use tool to manage your bibliography
 - Organize, search, and annotate your BibTex entries
 - *JabRef, BibDesk, EndNote, ...*
- Use one tool for both
 - Manage, search, and comment both PDF documents and BibTex entry
 - Mendeley (freemium) <https://www.mendeley.com>
 - Zotero (freemium) <https://www.zotero.org>
 - Citavi (freemium) <https://www.citavi.com>

- 1) Find 10 related papers and retrieve their BibTex entries.
- 2) Annotate the problems, goals, solution, and evaluation for each one.
- 3) Manage your bibliography and export the 10 papers as BibTex file.

ASiCS

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