



Literature Search Practice, LaTeX, and BibTeX

CSCI 16: Intro to the CS Research Process
4th Meeting, Tuesday, January 10, 2023
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Attribution



Except where otherwise noted, ERSP and all associated resources were developed by Christine Alvarado, UC San Diego, Department of Computer Science and Engineering.

These slides were originally jointly developed by Christine Alvarado and Mai ElSherief. They have been adapted by Kelly Shaw for CSCI 16 at Williams College.



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Today's Plan

- Practice literature searching on of “SleepGuru”
- Using Overleaf to write papers in LaTeX
- Using BibTeX for bibliography tracking

SleepGuru: Part 1 (20 minutes)

- Read the Introduction and Related Work sections
- Identify the cited papers that relate most closely to this work
 - Annotate how each paper relates to this work.

SleepGuru: Part 2 (10 minutes)

- For SleepGuru and the most highly cited papers
 - Assess their quality based on the venues in which they were published

SleepGuru: Part 3 (5 minutes)

- Use Google Scholar to find where this work has been cited
 - How does that work relate to SleepGuru?

SleepGuru: Going broader (10 min)

- Use ACM Digital Library to search for work related to SleepGuru
 - What keywords did you use?
 - How easy or difficult was it to manage the results?
 - What are the advantages/disadvantages of using a broad database search?

Scientific Writing using LaTeX

- LaTeX is a typesetting tool used frequently in STEM fields for paper writing
 - A plain text file is marked up with LaTeX commands
 - When compiled, a PDF file is produced
- Overleaf is a web-based tool for writing and compiling LaTeX files

Activity: Learning LaTeX

- Create an Overleaf account
- Work through the “Learn LaTeX in 30 minutes” tutorial
 - https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes
- At the end of working through the tutorial, please have a file that compiles and has at least one section of text in it.

Creating a Bibliography in LaTeX: BibTeX

- BibTeX is used to generate bibliographies in papers written in LaTeX
- You create a .bib file that is a plain text file that has entries for each citation you want to reference
- It's also used to track papers you've read, including comments about those papers to create an annotated bibliography
 - The annotate field lets you do this

Building your bibliography: BibTeX

- As you find related work that is relevant, enter it into your BibTeX file, with a few sentences in your LaTeX file about how the paper is relevant and what it is about.



Conferences > 2015 IEEE International Confe... ?

Simultaneous Deep Transfer Across Domains and Tasks

Publisher: IEEE [Cite This](#) [PDF](#)

Eric Tzeng ; Judy Hoffman ; Trevor Darrell ; Kate Saenko [All Authors](#)

443 Paper Citations	3 Patent Citations	1088 Full Text Views
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Activity: Learning BibTeX

- Create a BibTeX file that contains citations for SleepGuru and the most important citations you found in SleepGuru.
- Use this guide for help: <https://www.overleaf.com/blog/532-creating-and-managing-bibliographies-with-bibtex-on-overleaf>
 - Add a .bib file to your Overleaf project
 - Add an entry for each of the SleepGuru citations
 - Add commands to your main.tex file to use the .bib file for the bibliography
 - `\bibliographystyle{plain}` % We choose the "plain" reference style
 - `\bibliography{refs}` % Entries are in the "refs.bib" file
 - In the text of your main.tex, add citations to each of the papers, using the `\cite` command