

Capstone!

Coping with information
overload

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About 1,680,000 results (0.51 se



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Today's class

[MSE 410/411 guide](#)

What do you need in your literature review?

- Books/book chapters
- Market research reports
- Standards
- Patents
- Writing
- Citation

Ancient academic proverb:

*“Two hours in the library will save you
two weeks in the lab”*

Survey: How “up to speed” are you on your topic?

How to get up to speed?

Concussion and Vital Signs Monitoring Wearable Technology

“The objective of the project will be to design and prototype an easy to use headband that can wirelessly monitor EEG using dry electrodes, heart rate using PPG, and motion using an accelerometer.”

Terms to search:

- Concussions
- Helmets / “smart” helmets
- EEG

Reputable book/book chapter sources:

Knovel

SpringerLink

AccessEngineering

Library Catalogue

Journal article/Conference paper

- Structured reports that document the creation of new knowledge
- Journals: peer reviewed, polished.
 - Results SHOULD be reproducible
- Conference papers: preliminary results. Less opportunity to revise
- Include literature reviews but provide limited background information
- Gain insight on relevant methodology, data.

Sources for articles/conference papers

ASME (American Society for Mechanical Engineers)

Springer

Science Direct

IEEE

Web of Science

What's the market demand?

- Financial information on the industry
- Which companies have market share?

[Frost and Sullivan](#) reports

Let's get technical:
Standards!

What is a standard?

Standards provide a commonly accepted authority for the design and function of all types of equipment.

- Electrical plugs
- Medical/safety equipment (helmets, prosthetics)
- Wireless protocols

Standards database: Techstreet

Question: *“I would like to get access to the European Standard EN 14872: Bicycles – Accessories for bicycles – Luggage carriers. can you help?”*

Response: Showed the library guide for mechatronic and the standards guide. We found the resource through techstreet but sfu library isn't subscribed to this resource. I wasn't sure if interlibrary loan would work so I suggested we could contact Holly about how they could gain access to the resource. But the students have a tight deadline and couldn't wait for next week and decided to use other standards

Don't be this person

How to get a standard?

Ask me

ONE or TWO WEEKS IN ADVANCE

Let's get legal: patents!

Patents protect inventors from making, using, selling, or importing copies of their invention, for a limited time.

Rights granted by a patent office are specific to a geographical area.

Patents contain descriptive and useful technical information (including drawings or diagrams) that may not be found elsewhere. They also cite references that can serve as additional sources of information.

Canadian Intellectual Property Office

Basic Search: [Patent Database](#)

Search by name, number, keyword

Building YOUR authority: citation conventions

Your reference list = your community.

NOT random (“I need 5 sources zzzzz”) but chosen!

You: “These are the smart people whose work I’m building on”

IEEE style: in-text

[1]

Creativity has been championed as integral to successful engineering design, since it embodies the fundamental spirit of engineers to create something new and valuable [1] and is seen as the core of product innovation [2]. As a whole, the engineering discipline focuses on developing innovative solutions to problems that span across technical, societal, and global contexts [3] due to the positive impacts on the economy [4]. From a practical standpoint, creativity can improve design outcomes [5], and thus, enhance the design process. As part of this effort, the concept generation and concept selection stages have received a wealth of attention in design research for their tremendous ability to influence the creativity of design outcomes.

Sample IEEE References

Book--Single Author

[1] W. K. Chen, *Linear Networks and Systems*. Belmont, CA: Wadsworth Press, 2003.

Selection in an Edited Book

[3] E. D. Lipson and B. D. Horwitz, "Photosensory reception and transduction," in *Sensory Receptors and Signal Transduction*, J. L. Spudich and B. H. Satir, Eds. New York: Wiley-Liss, 2001, pp-1-64.

Paper Published in Conference Proceedings

[12] J. Smith, R. Jones, and K. Trello, "Adaptive filtering in data communications with self improved error reference," In Proc. IEEE International Conference on Wireless Communications '04, 2004, pp. 65-68.

Article in Professional Journal (paginated by issue)

[9] J. Attapangittya, "Social studies in gibberish," *Quarterly Review of Doublespeak*, vol. 20, no. 1, pp. 9-10, 2003.

Citation Management: Zotero

The screenshot shows the Zotero application window. The left sidebar contains a tree view of libraries, with 'My Library' expanded to show 'Colonial Medicine'. The main pane displays a list of citations with columns for Title, Creator, and Year. The selected entry is 'Circulation of Medicine in the Early Modern Atlantic World' by Cook and Walker, 2013. The right pane shows details for this entry, including item type, title, authors, abstract, and publication information.

Title	Creator	Year
Guerre, maladie, empire. Les services de santé militaires en ...	Zaugg	2016
Officiers de santé et soignantes créoles face à la fièvre jaune	Nobi	2016
The Emergence of Tropical Medicine in France	Osborne	2014
Colonial Disease, Translation, and Enlightenment: Franco-Briti...	Charters	2014
Trading in Drugs through Philadelphia in the Eighteenth Centu...	Wilson	2013
The Medicines Trade in the Portuguese Atlantic World: Acquisi...	Walker	2013
Leprosy and Slavery in Suriname: Godfried Schilling and the Fr...	Sneiders	2013
Medical Experimentation and Race in the Eighteenth-century ...	Schiebinger	2013
The Circulation of Bodily Knowledge in the Seventeenth-centu...	Gómez	2013
Circulation of Medicine in the Early Modern Atlantic World	Cook and Walker	2013
Synthesis of scholarship on "medicines" to restore focus o...		
Full Text PDF		
Colonial Medical Encounters in the Nineteenth Century: The Fr...	Thoral	2012
Networks in Tropical Medicine: Internationalism, Colonialism, a...	Neill	2012
Early Clinical Features of Dengue Virus Infection in Nicaraguan...	Biswas et al.	2012
Medicine in an age of commerce and empire: Britain and its tr...	Harrison	2010
Finding the "Ideal Diet": Nutrition, Culture, and Dietary Practi...	Neill	2009
Battles of the Self: War and Subjectivity in Early Modern France	Pichichero	2008
The Experiments of Ramón M. Termeyer SJ on the Electric Eel ...	de Asúa	2008
Psychiatry and Empire	Mahone and Vaughan	2007
Medicine and the Market in England and Its Colonies, C.1450-...	Jenner and Wallis	2007
Matters of exchange: commerce, medicine, and science in the...	Cook	2007
A Horrible Tragedy in the French Atlantic	Rothschild	2006
"Neither of meate nor drinke, but what the Doctor alloweth": ...	Chakrabarti	2006
Transnationalism in the colonies: Cooperation, rivalry, and rac...	Neill	2005
Variolation, Vaccination and Popular Resistance in Early Coloni...	Brimmes	2004
"Syphilis, Opiomania, and Pederasty": Colonial Constructions ...	Proschan	2003
Choosing Scientific Patrimony: Sir Ronald Ross, Alphonse Lav...	Guillemin	2002
Madness and Colonization: Psychiatry in the British and Frenc...	Keller	2001
The Colonial Machine: French Science and Colonization in the ...	McClellan and Rego...	2000
From medical astrology to medical astronomy: sol-lunar and pl...	Harrison	2000
Disease and Empire: The Health of European Troops in the Co...	Bynum	2000

Item Type: Journal Article
Title: Circulation of Medicine in the Early Modern Atlantic World
Author: Cook, Harold J.
Author: Walker, Timothy D.
Abstract: The search for powerful drugs has caused people and commodities to move around the globe for many centuries, as it still does...
Publication: Social History of Medicine
Volume: 26
Issue: 3
Pages: 337-351
Date: 2013/08/01
Series: Soc Hist Med
Series Title: en
Series Text: en
Journal Abbr: Soc Hist Med
Language: en
DOI: 10.1093/shm/hkt013
ISSN: 0951-631X
Short Title: en
URL: https://academic.oup.com/shm/article/26/3...
Accessed: 1/24/2018, 10:17:12 AM
Archive: en
Loc. in Archive: en
Library Catalog: en
Call Number: en
Rights: en
Extra: en
Date Added: 1/24/2018, 10:17:12 AM
Modified: 1/24/2018, 11:50:15 AM

Where to incorporate your research?

Coming soon: requirements for your technical report

- Every technical report has a section where background information is provided
- Rationale, prior work, methodology justified

Next steps

Do you need more support in...

- Research strategy?
- Citation management
- Writing?
- Other?

Questions?

Contact me: hah1@sfu.ca