# CMPT 105W Library Research presentation

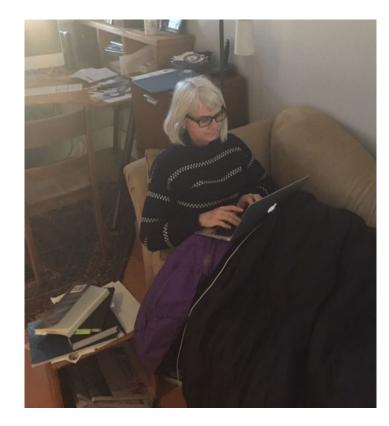
Holly Hendrigan Librarian, FAS September 2023

# Today's Workshop

- 1. 1st hour: Introduction, inspiration
- 2. Menti question!
- 3. CMPT 105W guide
- 4. SIFT
- 5. 5 Information Needs approach
- 6. 2nd hour: citation

# Introduction

- I've been at SFU Library since 2009; held FAS portfolio (SEE, ENSC, MSE, CMPT) since 2016
- Based in Surrey
- 1993-2009, at Vancouver Public Library (Science & Technology, and Business Divisions)
- It's my JOB to support students, so never hesitate to ask questions
- If you want to remain anonymous, use AskAway.



# Mentimeter! Menti.com 7499 4761

In the ChatGPT era, why do you need to learn how to conduct a literature search, using resources made accessible through SFU Library?

# Questions from ENSC 105W students (2020)

"If you are not familiar with a topic, is it wise to use scholarly articles when beginning research for a topic, or should you start off with simpler, less formal sources to get a basic grasp of the topic?"

"how would you approach reading, understanding, and using information in research journals that is more complicated than what you understand? eg. jargon-heavy or really complicated topics?"

"Is it okay to not only refer to scholarly sources when discussing controversial topics? wouldn't the public's opinion (educated or not) play a useful role in helping with a persuasive paper?"

Can anyone in the room relate?



Photo by Michelle Tresemer on Unsplash

# CMPT 105W guide

- Includes all the resources I will talk about today, and more!
- SIFT technique of evaluation and finding best sources
- An approach to doing research when you are learning about the subject at the same time as you are writing your paper.
- Leverage easy-to-read sources to find academic/authoritative sources!

Scholarly method of evaluation: close reading. Optimally works when you have high domain knowledge and adequate time.

- Peer reviewers (experts in same field as author) closely read manuscripts and look for issues with data, methodology
- Where does this leave those of us with imperfect knowledge and limited time to develop expertise?
- Professional fact checkers spend little time on the source and more time "Investigating the source." Fast, effective means of evaluating sources



See CMPT 105W guide

Introduction to SIFT

# How did people investigate rumours 100,000 years ago?

- They'd ask, "Who is telling me this? Is this person reliable?" (Investigate the source)
- They'd ask, "What does my go-to reliable source say?" (Find better coverage)
- They'd ask, "Who did you hear this from?" (Trace claims to the original source)

Source: Mike Caulfield talk hosted by Mount Royal University, March 4 2022.

# How else to find sources?

5 overlapping categories of information

- Background sources
- Current events
- Statistics
- Opinions
- Research

Adapted from Lane Wilkinson "Information Needs, Types, and Qualities"

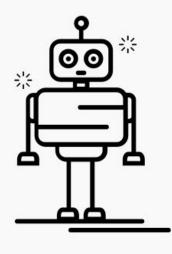
# Think about paper's structure

Section of paper	Type of information needed
Introduction (hook)	Background sources, current events, statistics
Thesis statement (topic and arguments you will make)	
Body (Evidence supporting your thesis statement)	Current events, statistics, opinion, research sources

Pick an informative topic for applying computing, engineering, science, or technology to enhance the quality of care for older adults grappling with dementia and/or age-related disabilities, particularly in the context of the global challenge of population aging. The chosen topic should carry significant implications for social, environmental, and/or ethical considerations.

# Topic: Robots in nursing homes

Draft hypothesis: Robots are increasingly employed in nursing homes, but their functions are limited.





Robot

By Sinistrad Noun project

# Search terms matter:

- Broad topic terms: Nursing homes, Long term care, Senior Citizens, Aged peoples
  - Narrower term: dementia
- Combine with issue (Boolean AND) (robots, robotics, eldertech)
- Combine with more issues (privacy, bias, equity)
- Include application (wearable technology, IoT)

# **Background sources**

- Where do you go to get the big picture?
- Wikipedia, Google
- Librarians:
  - Gale e-books: collection of encyclopedias
  - "aging population": Encyclopedia of the Life Course and Human Development
  - Provides background

Also: long form journalism !

- New York Times
- Washington Post
- The Atlantic magazine



# Can Robots Save Nursing Homes?

The pandemic has given a new urgency to the development of robots and 'virtual assisted living' that can help care for aging adults, physically and emotionally.



By John Leland April 21, 2022



# Why do I like the New York Times?

- Well written
- Well researched
- Stories include multiple viewpoints

YMMV. What sources do you find consistently good and interesting?

• Can be a podcast!

#### Snippets from NYT piece!

Arshia Khan asked a group of older adults in Minnesota what they would like in a nursing home, and their answer surprised her. They wanted standup comedy, but not just any comedy: They wanted off-color jokes.

Dr. Khan, a professor of computer science at the University of Minnesota Duluth, programs robots to work in nursing homes.

This has left an existential problem for facilities for older adults: People don't want to live there, don't want to work there, and don't want to place their parents there. Since 2020, more than 300 nursing homes have closed, said Mark Parkinson, president of the American Health Care Association, a trade group that represents 14,000 nursing homes and assisted living facilities. More than 400,000 workers at long-term care facilities have left the profession, according to the U.S. Bureau of Labor Statistics.

#### 1st of 11 interviews in story

- 3 Academics
- 1 Eldercare organization spokesperson
- 3 Nursing home administrators
- 1 Best Buy executive
- 1 Nursing home residents
- 1 Robot

# Provides cites official (government) statistics

Alexis Elder, a philosophy professor and ethicist who works with Dr. Khan, said the use of robots in nursing homes raises a range of ethical issues. Who should get access to the robots' extensive monitoring data — only the residents and doctors, or should their families also have it? And will the robots ultimately diminish human-to-human contact, an essential part of care?

The robots also carry associations of gender and ethnicity, Dr. Elder said. "Most robots are white-presenting, and their speech patterns and vocal ranges are playing to some stereotypes on racial dimensions. I think this is going to be an interesting challenge, and really important to make progress in that area."

On gender, she said, if the robots present as female and subservient, will residents then become more belligerent with female workers? Expert in ethics interviewed: "range of ethical issues" detailed

# Current events. How do you find news articles?

# Current events

- Google news
- Canadian news?
  - Big fight right now between Canadian gov't and Google/Facebook/Instagram/Twitter
  - Online News Act "requires tech companies like Google and Meta to compensate news outlets for sharing links to their pages"
- Google: search term + : CBC OR Globe and Mail

# How do you get access to the Globe and Mail?

- Hint: it is in the course guide
- <u>Canadian Newsstream!</u>

# A word about "bias"

Naomi Oreskes: science is not value free and that it should not be, because passionate people are driven by their values to add to human understanding. Instead, include as many people as possible from different perspectives in the scientific community so that our human biases somewhat balance each other.

Oreskes, N. (2019) Why trust science? Princeton University Press

# **Statistics**

- <u>Statista</u>: Nursing homes AND canada
  - Statista report references Statistics Canada's "<u>A portrait of Canada's</u> growing population aged 85 and older from the 2021 Census"

# **Opinion sources**

What are your favourite opinion sources? Podcasts? YouTube channels?

Magazines: long form journalism explains topic and often discusses debate

<u>The Conversation</u> ("Academic rigour, journalistic flair") Academic write readable prose <u>The Atlantic</u>

<u>The New Yorker</u> ("nursing home AND robot\*")

"What Robots Can—and Can't—Do for the Old and Lonely

### Research

- In an academic setting, you need to delve into the academic literature
  - Pay attention to results/conclusions
- Use what you've already got (references to books, articles, reports mentioned by other writers or opinionaters)
- Journal articles are often VERY SPECIFIC

- HIGHLY RECOMMENDED DATABASE FOR HEALTHCARE RESEARCH: <u>PubMed</u>
  - Search Robots and Nursing Homes AND ethics
- Engineering database: Compendex
  - Search nursing homes AND robot\* OR dementia AND robot\*

# Finding research

- 1. Library search: "robots and nursing homes"
  - a. Books in middle column
  - b. Journal articles in left column
- 2. Subject databases, eg <u>Academic Search Premier</u>, PubMed, Compendex
- 3. Google scholar

# Summing up

- Source discovery and evaluation happen at the same time
- Get a sense of your topic from multiple perspectives
- As much as possible, find webs of trusted sources (credible author in credible publication citing or quoting research(er) at reputable university)



# Questions

email : hah1@sfu.ca

Ask a Librarian services