

Leveraging AI in Research

Sima Sajjadiani, PhD
Sauder School of Business
University of British Columbia

Using AI for Theoretical Insight

- AI in research is often framed around prediction and automation
- Theory-building requires interpretation, explanation, and conceptual clarity
- We can use AI for theorizing too: surfacing structure in unstructured data
- The goal is to generate theory, not just detect patterns

Example from My Research

- Theoretical puzzle: How do categories stabilize under crisis conditions?
- Data: 260k Reddit posts + over 2k government documents & media coverage
- Step 1: Structural Topic Modeling (STM) to detect discourse themes
- Step 2: Qualitative coding of stratified sample across 23 topics
- Step 3: Sentence-BERT to quantify 8 theoretical concepts across the full dataset
- Outcome: Novel theoretical insight

Takeaways

- Start with the theoretical puzzle
- Use AI to surface and not substitute interpretation.
- Treat the pipeline as part of your argument