

Preaching to the Choir: Lessons IR Should Share with AI

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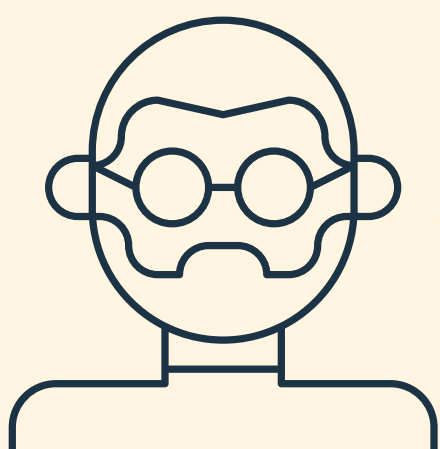


Information Retrieval (IR)

Artificial Intelligence (AI)

Google!

1998



Google has solved IR, so why are you still doing IR research?

You'll be fine!



2022



ChatGPT



Similarities



Technological Barriers



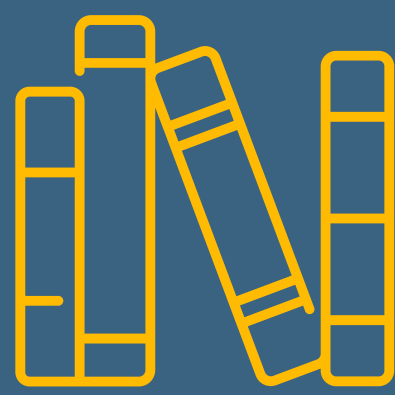
Queries vs. Prompts

Query formulation vs. prompt engineering
Query variation vs. prompt variation



Ethical, Societal, Legal, and Economical Issues

Ethics, social accountability, responsible AI
Privacy and copyright issues
Follow the money
Open vs. Closed
Adversarial attacks



Philosophical and Conceptual Issues

Reality is messy
Terminology



Evaluation and Benchmarks

Benchmarks and metrics
Reliability and robustness of benchmarks
Reproducibility of evaluation results for non-public models



Differences



The Importance of Human Factors



Community

Size of the field
Conflictuality
Publication practices
Focused vs. "Inclusive" community



Increased Attention to Values

Bias and value alignment
Explainability and interpretability
Copyright and data ownership
Green AI

Recommendations from Lessons Learned by the IR Community



R1. Reflect on benchmarks and metrics



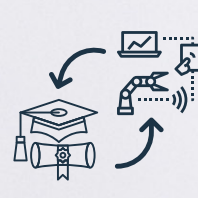
R2. The system is more than the algorithm



R3. Keep teaching the history of the field



R4. Funding of fundamental research is crucial



R5. Academic research can continue to thrive alongside industry



R6. Do not underestimate the importance of terminology



R7. Lower conflictuality

Post your recommendations here!