Learning to Rank Citations

- ## What's been done?

  - Unlike active learning, which requires **explicit relevance feedback** in order to **re-rank** a result set, learning to rank seeks to **learn a model** capable of ranking documents [84]

    - It does **not rely** on explicit relevance feedback

  - Existing learning to rank algorithms have been shown to **outperform** previous probabilistic ranking functions [15]

- ## What's the gap?

GAP **Unclear how to learn a model for this domain.**

[84] Andrew Trotman. Learning to rank. Information Retrieval, 8(3):359–381, 2005.
[15] Olivier Chapelle and Yi Chang. Yahoo! learning to rank challenge overview. In Proceedings of the Learning to Rank Challenge, pages 1–24, 2011.

Screening Prioritisation

- Any active/machine learning approach to screening prioritisation still requires **screening all citations**

- In some cases it is only used to **replace second screener**

- Automatically ranking citations

  - **No explicit relevance feedback**

  - **Cutoff estimation**