RANKLENS - A MOBILE SEARCH ENGINE

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ABSTRACT

- Ranklens is an Android mobile search engine.
- BM25 is used to rank content.
- Incorporates PageRank/HITS link analysis optionally.
- Includes using Material UI .

INTRODUCTION

- Web data explosion necessitates effective retrieval.
- Ranklens incorporates infrared algorithms into a mobile application.
- Shows real-time hybrid ranking.

LITERATURE REVIEW

1. Vector Space Model and TF-IDF.
2. A probabilistic IR model is BM25.
3. For link-based ranking, use PageRank and HITS.
4. Lightweight retrieval using mobile infrared systems.

METHODOLOGY

- Colab crawling and indexing .
- BM25 + link score blending is the ranking model.
- RecyclerView on the front end of an Android app.

DISCUSSION

1. **Strengths:** Link scores lower spam and BM25 relevance.
2. **Limitations:** No live crawling, small dataset.
3. **Future Projects:** Firebase integration and neural embeddings.

CONCLUSION

- Ranklens uses a mobile device to demonstrate IR models.
- Integrates link analysis and BM25.
- Offers both scholarly and useful insights.
- Foundation for upcoming studies on mobile infrared.

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THANK YOU