

# **RANKLENS - A MOBILE SEARCH ENGINE**

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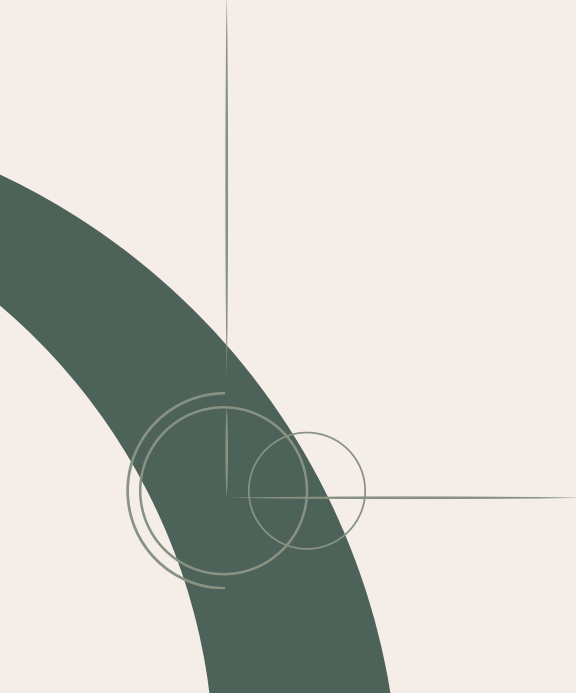

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# ABSTRACT

- 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.
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# 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.
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# 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.



# REFERENCES

- [1] J. Kleinberg, “Authoritative sources in a hyperlinked environment,” *Journal of the ACM*, vol. 46, no. 5, pp. 604–632, 1999.
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**THANK YOU**