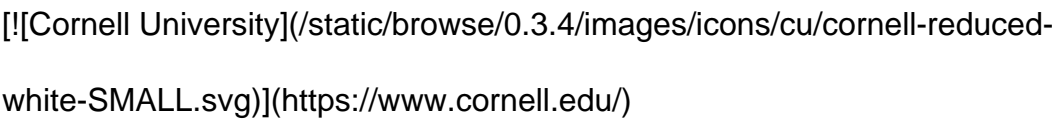


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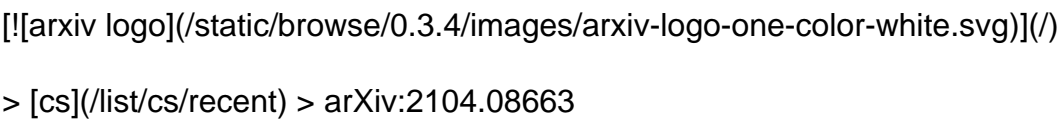
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> To address this, and to facilitate researchers to broadly evaluate the
> effectiveness of their models, we introduce Benchmarking-IR (BEIR), a robust
> and heterogeneous evaluation benchmark for information retrieval. We
> leverage a careful selection of 18 publicly available datasets from diverse
> text retrieval tasks and domains and evaluate 10 state-of-the-art retrieval
> systems including lexical, sparse, dense, late-interaction and re-ranking
> architectures on the BEIR benchmark. Our results show BM25 is a robust

> baseline and re-ranking and late-interaction-based models on average achieve
> the best zero-shot performances, however, at high computational costs. In
> contrast, dense and sparse-retrieval models are computationally more
> efficient but often underperform other approaches, highlighting the
> considerable room for improvement in their generalization capabilities. We
> hope this framework allows us to better evaluate and understand existing
> retrieval systems, and contributes to accelerating progress towards better
> robust and generalizable systems in the future. BEIR is publicly available
> at [this https URL](https://github.com/UKPLab/beir).

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