Semantic Search for Literature Retrieval for the Environmental Domain

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Problem

- Literature search is an unavoidable first task for any research project.
- Researchers rely on systems utilizing standard search engine techniques.
- Several key articles or documents may be missed in the search process due to those search engine techniques which rely mainly on keyword matching.

Solution:

Build a semantic search system to enhance the literature retrieval for the environmental domain.

EnvoScholar

System Design

Annotation Study

- Getting human judgements on what environmental concepts are discussed in scholarly texts.
- Annotations are ground truth for evaluating performance of our system.

...Andres & Harriss (1973) measured relatively high % of... Contaminated Everglades Sediments
in Everglades sediments, noting that samples from the Everglades
were comparable to... Contaminated Mobile Bay Sediments
...Contaminated
Sediment

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