INFORMATICS INSTITUTE OF TECHNOLOGY

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In Collaboration with

UNIVERSITY OF WESTMINSTER

"Lawyer Laboratory"

Lawyer Recommendation System

A Project Specification and Prototype Design by

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ABSTRACT

The legal profession necessitates a thorough understanding of the law and its complexity. Finding the correct lawyer to handle a specific legal case, on the other hand, may be a difficult endeavor for clients, especially those with no prior expertise or knowledge of the legal system. To address this issue, this paper presents a lawyer recommendation system that employs a hybrid method to give customers individualized and accurate legal suggestions.

To discover and rank attorneys who are most suited for a client's unique legal needs, the proposed system combines content-based filtering with collaborative filtering approaches. To discover attorneys with suitable skill and experience, the content-based filtering technique evaluates a client's case facts and personal preferences. The collaborative filtering technique, on the other hand, considers prior clients' comments and ratings to give new insights and increase the accuracy of the recommendations. The system was tested on a lawyer dataset, and the findings demonstrate that the suggested hybrid technique outperforms individual content-based and collaborative filtering approaches in terms of TF-IDF vectorizer and cosine similarity. Nevertheless, the suggested lawyer recommendation system is a useful tool for people seeking legal counsel and has the potential to increase access to justice. This system's hybrid method is adaptable to different recommendation systems and domains, making it an interesting route for future study.

Keywords : Recommendation Systems, Machine Learning, Personalized recommendations, Collaborative Filtering, Content Based Filtering, TF-IDF, Popularity Based Recommendation System, Cosine Similarity

Subject Descriptors :

- Information systems → Information retrieval → Retrieval tasks and goals → Recommender systems

• Human-centered computing → Collaborative and social computing → Collaborative and social computing theory, concepts and paradigms → Social recommendation

• Computing methodologies→Machine learning→Machine learning algorithms→Ensemble methods