

عنوان مقاله:

Exploring the Efficiency of Topic-Based Models in Computing Semantic Relatedness of Geographic Terms

محل انتشار:

فصلنامه بین المللی وب پژوهی، دوره 2، شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 13

نویسندگان:

Hossein Sadr - *Department of Computer Engineering Rasht Branch, Islamic Azad University Rasht, Iran*

Mozhdeh Nazari - *Department of Computer Engineering, Rasht Branch, Islamic Azad University, Rasht, Iran*

Mir mohsen Pedram - *Department of Electrical and Computer Engineering Faculty of Engineering, Kharazmi University Tehran, Iran*

Mohammad Teshnehlab - *Industrial Control Center of Excellence, Faculty of Electrical and Computer Engineering, K. N. Toosi University of Technology, Tehran, Iran*

خلاصه مقاله:

Large number of semantic relatedness measures have been presented since the last decades. In spite of an extensive number of studies that have been conducted in this field, the understanding of their foundation is still limited in real world applications. In this paper, the state-of-the-art semantic relatedness measures are surveyed and in the following a unified topic-based models is proposed to highlight their equivalences and propose bridges between their theoretical bases. Presentation of a comprehensive unified approach of topic based models induces readers to have common understanding of them in spite of the complexities and differences between their architecture and configuration details. Moreover, it may underlie fundamental development of these models. Comprehensive experiments in application of semantic relatedness of geographic phrases have been conducted to evaluate topic based models in comparison to ontology-based models. Based on the obtained results, not only topic-based models in comparison to ontology-based models confront with fewer restrictions in real world, but also their performance in computing semantic relatedness of geographic phrases is significantly superior to ontology-based models.

کلمات کلیدی:

Semantic Relatedness, Topic-based Models Latent Semantic Analysis, Latent Dirichlet Allocation, Explicit Semantic Analysis, Geographical Information Science Introduction

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1035894>

