Abstract

KISTI's Technology Opportunity Discovery (TOD) is a service to detect and provide opportunities for the new technologies and products. Patent is the right resource to analyze promising technologies and products, and their life cycles. In addition, patents can recognize relationship among assignee companies and countries for such technologies and products. The TOD service can suggest technology opportunities and candidate partners or competitors.

Various Natural Language Processing techniques were used to extract information from all patents published during the past 20 years. A dictionary and similarity-based named entity recognition, a pattern-based relation extraction, and a machine learning-based filtering were the NLP techniques in the TOD service and experimental results showed an encouraging performance.

This presentation will introduce the KISTI's TOD service focused on NLP techniques in the TOD service and opportunities detected by the service.