Long-Term Care Platform Based on Semantic Web and Cloud Computing Technologies

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Abstract
According to the population estimates by the National Development Council, Taiwan is expected to enter the aging society in 2018. The inadequate manpower of long-term care basic service is one of the main issues in the aging society. This study explores how to provide correct and appropriate services for the long-term care cases and recommend the appropriate caring personnel automatically, as well as make good use of limited service manpower. This study proposes an Integrating Statistics and Machine Learning into Cloud Semantic Framework (ISMLCSF). TF-IDF, Naïve Bayes Classifier and Open Data technologies are adopted in machine learning process. Based on the proposed ISMLCSF, this study develops a Cloud Long-Term Care Platform (CLCP) to provide appropriate services to the long-term care cases who need it. These services can be converted into category subjects and integrated into semantic technology to achieve an intelligent inference. In this way, all long-term care cases can receive the desired services to promote effective use of long-term care manpower resources.

Key Words: long-term care, cloud computing, semantic web, open data  
JEL Classification: D83, L86