

Wetland Ontology Modeling to apply the Context-aware Technology for Application Service Environment

Gwi-Hwan Ji

Dept of Computer Science and Information Engineering
Chung-Ju National University
Chungju-si, South Korea
wlrnlghks@gmail.com

Ryum-Duck Oh

Dept of Computer Science and Information Engineering
Chung-Ju National University
Chungju-si, South Korea
rdoh@cjnu.ac.kr, Corresponding Author

Abstract— Due to recent advances in the IT industry, the importance of ontology has increased as a tool of knowledge representation at home or abroad for implementation of intelligent and personalized service system such as next generation semantic web environment and ubiquitous computing environment. But, although the importance of wetlands are being recognized, systematic management is still not enough due to insufficiency of financial or professional management personnel. Therefore, this paper aims to analyze the information on the wetlands environment which provides a variety of human comfort, designs wetland environment context awareness data model by detecting lexical meaning and relationship between words using ontology techniques for the application of wetland environment, and presents methods for systematic management of the wetland environment.

Keywords: Context-aware, Ontology, Marsh-Environment, Semantic Web, Water-Quality Automatic Measurement Monitoring Location