



TOWARDS AN INTELLIGENT TUTORING SYSTEM FOR ENVIRONMENTAL DECISION MAKERS

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Abstract

The paper presents a novel approach which aims to support the training of decision makers in maritime environmental pollution policies via an intelligent tutoring system that focuses on the automatic generation of self-assessment material. More specifically, the paper reports on the automatic construction of multiple-choice question tests from knowledge bases i.e. domain ontologies, instances, if-then rules, and multimedia objects. The reported work has been conducted with a prototype environmental pollution knowledge base (focused on maritime pollution with oil) representing ontology classes and instances in OWL language and rules in SWRL, capturing knowledge related to policies of diagnosis and response, and environmental-change events, for oil spill pollution.

Key words: intelligent tutoring system, knowledge base, maritime pollution, semantic web technology

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