

A new approach to verifying conceptual models

Lee, J. ; Lai, Lien-Fu

Abstract

In this paper, we propose the use of task-based specifications in conceptual graphs (TBCG) to construct and verify a conceptual model. Task-based specification methodology serves as the mechanism to structure the knowledge captured in the conceptual model whereas conceptual graphs are adopted as the formalism to express task-based specifications. Verification of a conceptual model is performed on model specifications of a task through constraint satisfaction and relaxation techniques, and on process specifications of the task based on the resolution algorithm and the notion of specificity.