A tour advisory system using a logic programming approach

Stamatopoulos, Panagiotis

ACM

http://hdl.handle.net/11728/6455

Downloaded from HEPHAESTUS Repository, Neapolis University institutional repository
Title: A TOUR ADVISORY SYSTEM USING A LOGIC PROGRAMMING APPROACH

Year: 1993

Author: Panagiotis Stamatopoulos Isambo Karali Constantin Halatsis

Abstract: A PErsonalized Tourist INformation Advisor is presented, called PETINA, which is a system aiming at constructing tours that satisfy constraints specified by tourists. The system consults a database which contains information about activities, events and sites that refer to Greece. PETINA takes as input user wishes about tour generation expressed as constraints over visits' properties and its output is tours satisfying these constraints. The user wishes may be stated using either a formal language or a graphical interface. The method of computation applies to any problem domain, in case the problem involves combinatorial searching under some kinds of constraints that can be classified into some well defined categories. Although a logic programming approach is suitable and valuable for the formulation of combinatorial search problems, conventional Prolog systems fail to cope with them efficiently. PETINA has been implemented in the ElipSys language, which is a parallel logic programming system extended with various powerful mechanisms to allow efficient execution. Most of the ElipSys' features were proved to be indispensable for handling the complexity of the encountered problems.