e-univpm

Project in Artificial Intelligence

Topic: GraphLog, Graph analysis

Abstract:

Our project will allow the user to do queries regarding graph's structure and properties. Queries comprehend the main graph's characteristic and the ones more relevant for typical graph problems. Some possible queries are:
- Determine if the graph is eulerian
- Determine if the graph is a tree
- Determine which node is the tree root
- Determine which nodes are the tree leaves
- Determine if the graph is bipartite
- Determine graph's chromatic number
- Determine a node's star
- Determine graph's walks, paths and cycles
- Determine distance between 2 nodes and minimum paths
- Determine node's grade
- Determine node with maximum/minimum grade

Another goal of this project, is the transposition of graph optimization problems from mathematical programming to prolog.
If enough times Is provided, a GUI for graph and results rendering will be realized .

Worked by: **Accepted by:**
- Rahmi El Mehcri   Prof.Asoc.Dr. Endri Xhina
- Davide De Zuane