Carlos Eduardo Lopes Carretti

"CINEADD - Um Modelo para a Construção Interativa da Estória do Design"

Knowledge-based systems have been successfully used to help users to accomplish tasks in many domains. The system ability to explain its own suggestions is fundamental to guarantee its trustfulness. In this dissertation we propose an explanation system to intelligent CAD systems based in cinema techniques. The proposed system uses animation and cinema techniques (script, edition and filming techniques) to increse the user's perception on explanations generated by the knowledge-based system. In this system designers create a script specifying how the project decisions must be explained. These explanations, generated as answers to user's queries, are created according to this script, the project's development history and the domain knowledge stored in CAD system's knowledge bases. Users can reconfigure the designer script to further investigate an explanation and understand the processes that guided the focused artifact conception. A system's prototype applied to the oceanic oil pipeline layout domain showed the model viability.