應用知識工程KBE建構最佳化組裝順序系統之研究

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摘要

Abstract

The aim of this study focuses on developing the KBE-oriented assembly sequence planning system and further generate an optimal assembly sequence applying weight, volume, geometric features, contact- relationships and total penalty values as input parameters of neural networks (NN), and an output variable (optimal assembly sequence) derived by Above graphs, relational model graphs, assembly precedence graphs (APD) and analysis of spatial constraint relationships to construct a robust NN-based Assembly Sequence Planning engine and Knowledge database. Finally, the CAD second development tool, Unigraphics/Knowledge Fusion (UG/KF), is herein implemented to complete the KBE-oriented optimal assembly sequence system through the integration of NN engine and UG/CAD system.

關鍵字：Keywords: Above Graph, relational model graph, assembly precedence diagrams, back-propagation neural network