

Manufacturing Process and Cost Estimation through Process Detection by Applying Image Processing Technique

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Abstract : In order to reduce the transportation time and cost for direct interface between customer and manufacturer, the image processing technique has been introduced in this research where designing part and defining manufacturing process can be performed quickly. A3D virtual model is directly generated from a series of multi-view images of an object, and it can be modified, analyzed, and improved the structure, or function for the further implementations, such as computer-aided manufacturing (CAM). To estimate and quote the production cost, the user-friendly platform has been developed in this research where the appropriate manufacturing parameters and process detections have been identified and planned by CAM simulation.

Keywords : image processing technique, feature detections, surface registrations, capturing multi-view images, Production costs and Manufacturing processes

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