Intermediate Results in Active Inspection and Reverse Engineering

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<u>Abstract</u>

In previous work [18], we have proposed a new design for inspection and reverse engineering environments. We have investigated the use of the dynamic recursive context of discrete event dynamic systems (DRFSM DEDS) to guide and control the active exploration and sensing of mechanical parts for industrial inspection and reverse engineering, and utilized the recursive nature of the parts under consideration. In our recent work, we construct a sensing to CAD interface for the automatic reconstruction of parts from visual data. This report includes previous results and describes this interface in greater detail, demonstrating its effectiveness with a reverse-engineered, machined part.

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