

holistic manner in this framework. In discussing the application of the framework, a roadmap is defined and possible KM Initiatives for RSB are discussed. The paper concludes by suggesting that RSB starts small, refrain from large investments in technology, and moves towards incorporating KM-linked processes and systems into its daily activities.

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APPLICATION OF ADAPTIVE NETWORK BASED FUZZY INFERENCE SYSTEM FOR MODEL RECONSTRUCTION IN REVERSE ENGINEERING

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Combining fuzzy neural network and laser surface data measurement, a novel model reconstruction methodology is presented. This model reconstruction scheme includes two main parts, one is surface data measurement system, and the other one is model reconstruction algorithm. The surface data measurement system consists of a vision system with a smart laser camera and a

PC computer. The system is developed to measure data for freeform surface with complex shape. Using an Adaptive Network based Fuzzy Inference System (ANFIS), the model reconstruction algorithm is designed. For demonstrating the effectiveness of the presented scheme, a group points cloud data with good accuracy. This is measured by the presented data measurement system for an existing part and is taken as data sample for training the ANFIS. The trained ANFIS is taken as surface data model. By comparing the surface data, which is from trained ANFIS, with the data sample value, it can be found that the ANFIS model can match the real surface very well.

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