

ODONTOLOGICAL PATIENTS CLUSTERING BASED ON ART2 NEURAL NETWORK

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Abstract

This work presents the application of Artificial Neural Networks, in particular the ART2, for the customer clustering of a dentistry room. The input data used in the application is based on the odontological anamnesis that is a form with a questionnaire applied about the professional to identify the customer case history. The three proposed customer clustering (good, medium, bad) were created with basis on the buccal hygiene care and the similar habits among the customers. The network is trained using non-supervised learning that can be fast or slow learning. Each input data line is formed by the number of interviewed customers (rows) and by the answered questions (columns). However, the first step was to transform the answers into binary cells.

Keywords: Anamnesis, Adaptive Resonance Theory, Clustering.