

Personalize E-Learning System Based on Clustering and Sequence Pattern Mining Approach

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Abstract : Network-based education has been growing rapidly in size and quality. Knowledge clustering becomes more important in personalized information retrieval for web-learning. A personalized-Learning service after the learners' knowledge has been classified with clustering. Through automatic analysis of learners' behaviors, their partition with similar data level and interests may be discovered so as to produce learners with contents that best match educational needs for collaborative learning. We present a specific mining tool and a recommender engine that we have integrated in the online learning in order to help the teacher to carry out the whole e-learning process. We propose to use sequential pattern mining algorithms to discover the most used path by the students and from this information can recommend links to the new students automatically meanwhile they browse in the course. We have Developed a specific author tool in order to help the teacher to apply all the data mining process. We tend to report on many experiments with real knowledge so as to indicate the quality of using both clustering and sequential pattern mining algorithms together for discovering personalized e-learning systems.

Keywords : e-learning, cluster, personalization, sequence, pattern

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