Self-organizing linear lists

Self-organizing linear lists are data structures for fast search, provided that certain elements stored in them are searched more frequently than others, while the probability of access to individual elements is generally not known in advance. Efficient search is achieved using different permutation rules that keep changing the list structure so that the more frequently searched elements are closer to the beginning. This thesis gives an overview of known algorithms for solving this problem (with the theoretical results about their complexity, if they are known), and experimental study of their behavior (using its own or freely available implementations and software for generating input data, testing algorithms and processing the results of experiments).