S(b)-Tree Library: an Efficient way of Indexing Data

K. Schvachko
Program Systems Institute, Russia

Abstract

We present a new data structure for mantaining external dynamic dictionaries with variable length keys. We introduce a new type of balanced trees, called S(b)-trees, which contrary to the well known B-trees provide optimal packing of keys of variable length, while the data access time remains logarithmical, the same as for B-trees. S(b)-trees are implemented as a stand-alone library. The library functionality includes means for creating, storing, and performing the basic operations for S(b)-trees.