

Abstract

Research supervision services like providing study materials can be enhanced through mobile information retrieval algorithms. An example is semantic searching algorithms, which require the user to input one or two real world concepts. Systems that implement mobile learning approaches like ambient learning can use semantic searching algorithms to support research supervision services through mobile phones. However, there is low adoption of such approaches in some of the African universities. This has been attributed to limited technical limitations of mobile devices that include mobile phones. For instance, complex interfaces, restricted input and small screens on mobile phones make it difficult to enter search keywords when the user is in a hurry. As an attempt to address these limitations, this paper describes dynamic heuristics - greedy search algorithm that automatically generate search keywords. The algorithm can be used to allow flexible mobile information retrieval on a typical ambient learning system.