

Dengue Haemorrhagic Fever Diagnosis by using Case-Based Reasoning

Aye Aye Sann, Nang Saing Moon Kham

University of Computer Studies, Yangon

aye2sann@gmail.com, moonkhamucsy@gmail.com

Abstract

Case-based reasoning (CBR) has become a successful technique for developing medical diagnosis systems. CBR is an approach to knowledge-based problem solving and decision support. This paper presents CBR methodology and the technical aspects of implementing a medical diagnosis system. As a case study, Dengue Haemorrhagic Fever (DHF) Diagnosis system is implemented by using the basic idea behind CBR and classifies the severity of DHF. Nearest Neighbor techniques is applied for case retrieval. If the result of input case is not satisfied, the adaptation process is done. For the adaptation process, the retrieved solution is adapted by adaption rules to meet the input case's constraints. This system has been tested with DHF patient cases and overall system accuracy reaches 96%.