

Using High Level Information to Make Services and Applications Mobile Wireless Network Aware

Abstract

Mobile Wireless Networks (MWNs) context awareness will enable services or applications to adapt their behavior to the network situation by reconfiguring their underlying protocols. We studied whether high-level information, captured in the semantics of the events during emergency and rescue scenario might be exploited to map alternative solutions to the space-time graph and improve MWNs performance. Fuzzy C-Mean clustering and fuzzy reasoning for predicting the future state of space-time paths that the services and applications might use for reconfiguring the underlying protocols are proposed. RoboCup rescue scenario is used to evaluate the feasibility of the proposed fuzzy model.