MODELLING AND VERIFICATION OF THE SCTP PROTOCOL USING TIMED AUTOMATA WITH DISCRETE DATA

Summary - In the paper we construct a model for SCTP (Stream Control Transmission Protocol) – a transport layer protocol which provides mechanisms of reliable delivery. The protocol is modelled by a set of timed automata augmented with integer variables. The resulting model is then used to test the protocol w.r.t. certain properties expressed by the formulas of the temporal logic CTL (Computation Tree Logic).