

Learning Real-Time Automata from Multi-Attribute Event Logs

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Abstract

Network structures often arise as descriptions of complex temporal phenomena in science and industry. Popular representation formalisms include Petri nets and (timed) automata. In process mining, the induction of Petri net models from event logs has been studied extensively. Less attention, however, has been paid to the induction of (timed) automata outside the field of grammatical inference. In the talk, I will present work on the induction of timed automata and show how they can be learned from multi-attribute event logs. I will present the learning method in some detail and give examples of network inference from synthetic, medical and biological data.