

Counter Systems for Data Logics

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Abstract. Data logics are logical formalisms that are used to specify properties on structures equipped with data (data words, data trees, runs from counter systems, timed words, etc.). In this survey talk, we shall see how satisfiability problems for such data logics are related to reachability problems for counter systems (including counter automata with errors, vector addition systems with states, etc.). This is the opportunity to provide an overview about the relationships between data logics and verification problems for counter systems.