Abstract:

After highlighting the difficulties encountered when implementing a supervisor on a real controller and the limitations of existing solutions to handle them, this paper presents a signal-interpreted approach to the Supervisory Control Theory problem. Due to the differences between event- and signal-based approaches, new algorithms are introduced to apply a Supervisory Control Theory (SCT) approach on the basis of signal-interpreted Boolean Finite Automata extended with variables (EBFAs). The advantages of the proposed signal-interpreted approach are illustrated both on simple structures throughout the paper and on a case study at the end.
entries: