Variable list of the paper

Symbolic Verification of Current-state Opacity of Discrete Event Systems Using Petri Nets (Paper ID: SMCA-21-05-0955)

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N	A Petri net, $N = (P, T, Pre, Post)$
P	The set of places of a Petri net
T	The set of transitions of a Petri net
$\mathbb{N}$	The set of non-negative integers
Pre	The pre-incidence function of a Petri net
$Post$	The post-incidence function of a Petri net
C	The incidence matrix of a Petri net
M	A marking of a Petri net
$\langle N, M_0 \rangle$	A Petri net system
σ	A sequence of transitions
$R(N, M_0)$	The reachability set of a Petri net system $\langle N, M_0 \rangle$
G	A labeled Petri net, $G = (N, M_0, \Sigma, l)$
Σ	An alphabet
l	A labeling function assigning to each transition with a symbol or the empty word ε
$\mathcal{L}(N, M)$	The language generated from M of a labeled Petri net
w	An observation
$\mathcal{C}(w)$	The set of markings consistent with w
$\hat{T}$	A subset of T
$\mathcal{N}$	A next-state function
$\mathcal{M}$	A set of markings
Z	A directed acyclic graph, $Z = (Q, E)$
Q	A set of vertexes
E	A set of edges
$q^\bullet$	The postset of a vertex q
${}^\bullet q$	The preset of a vertex q
F	A multi-valued decision diagram, $F = (Q, E, D, \delta, q_0, q_t)$
D	The set of labels in a multi-valued decision diagram
δ	A labeling function associating an edge with a label from D
q_0	The root vertex of a multi-valued decision diagram
q_t	The terminal vertex of a multi-valued decision diagram
$q[\omega]$	The child vertex of q with respect to a label ω
ζ	A path in a multi-valued decision diagram
ζ_{tb}	A top-bottom path in a multi-valued decision diagram

ϱ	The label sequence of a path in a multi-valued decision diagram
$\mathcal{K}(F)$	The set of the label sequences of all top-bottom paths in F
H	A matrix diagram, $H = (Q, E, \mathcal{D}, \delta, q_0, q_t)$
$\mathcal{D}$	A set of label pairs in a matrix diagram
η	A path in a matrix diagram
η_{tb}	A top-bottom path in a matrix diagram
τ	The label sequence of a path in a matrix diagram
$\mathcal{K}(H)$	The set of the label sequences of all top-bottom paths in H
$\bar{\mathcal{N}}$	The matrix diagram with respect to a next-state function $\mathcal{N}$
S	A secret
$ex(S)$	The set of exposable markings.
F_o	An MDD-based observer
$\mathcal{N}(\mathcal{M})$	The unobservable reach of a set of markings $\mathcal{M}$
$\mathcal{N}(\mathcal{M}, \alpha)$	The α-reach of a set of markings $\mathcal{M}$
$\hat{\mathcal{M}}$	A multi-valued decision diagram that represents a set of markings $\mathcal{M}$
$\bar{\mathcal{N}}_\varepsilon$	The matrix diagram decided by unobservable transitions.
$\bar{\mathcal{N}}_\alpha$	The matrix diagram decided by the observable transitions labeled with α.
F_e	An exposable marking constructor
F_v	An MDD-based verifier