

Data Quantification in Temporal Specification Languages

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November 23, 2017

In this working group, we tried to collect and characterize the different kinds of quantification that can be encountered in temporal specification languages used in the runtime verification community.

Standard First-Order Quantification FOLTL [8] MFOTL [2, 6]

Quantification over the Active Domain What is the active domain in a trace?

all seen values

database community LTL-FO [7]

all previously seen values

values at current time-point

LTL^{FO} [4]

LTL-FO⁺ [10]

Parametrized LTL [13]

LTL₄-C [11]

Freeze Quantification [3]

Templates and Parametric Trace Slicing LOLA [9]

Parametric Trace Slicing [5, 12]

QEA [1]

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