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Refereed Reference Article

Patrick Doherty, Joakim Gustafsson, Lars Karlsson, and Jonas Kvarnström:

TAL: Temporal Action Logics Language Specification and Tutorial

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Abstract: *The purpose of this article is to provide a uniform, lightweight language specification and tutorial for a class of temporal logics for reasoning about action and change that has been developed by our group during the period 1994-1998. The class of logics are collected under the name TAL, an acronym for* `Temporal Action Logics`. *TAL has its origins and inspiration in the work with Features and Fluents (FF) by Sandewall, but has diverged from the methodology and approach through the years. We first discuss distinctions and compatibility with FF, move on to the lightweight language specification, and then present a tutorial in terms of an excursion through the different parts of a relatively complex narrative defined using TAL. We conclude with an annotated list of published work from our group.*

The article tries to strike a reasonable balance between detail and readability, making a number of simplifications regarding narrative syntax and translation to a base logical language. Full details are available in numerous technical reports and articles which are listed in the final section of this article.

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Besides the publication and review history, it contains links for contacting the author(s), as well as to amendments and other related information for the article. It is intended to keep these links up-to-date in the future.

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