研究室名	上出哲広研究室　論文発表

題名	Falsification-aware semantics for CTL and its inconsistency-tolerant subsystem: Towards falsification-aware model checking
掲載雑誌	Proceedings of the 14th International Conference on Agents and Artificial Intelligence (ICAART 2022), Volume 3, pp. 242-252, Science and Technology Publications, 2022.
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概要	This study introduces two falsification-aware Kripke-style semantics for computation tree logic (CTL). The equivalences among the proposed falsification-aware Kripke-style semantics and the standard Kripke-style semantics for CTL are proven. Furthermore, a new logic, inconsistency-tolerant CTL (ICTL) is semantically defined and obtained from the proposed falsification-aware Kripke-style semantics for CTL by deleting a characteristic condition on the labeling function of the semantics. Because ICTL is regarded as an inconsistency-tolerant and many-valued logic, the proposed semantic framework for CTL and ICTL is regarded as a unified framework for combining and generalizing the standard, inconsistency-tolerant, and many-valued semantic frameworks. This unified semantic framework is useful for generalized model checking, referred to here as falsification-aware model checking.
関連画像	