



Workshop 2018
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Title: « Live programming: challenges and solutions »

Abstract:

The ALE team contributes to the field of Software Language Engineering, aiming to provide more agility to both language designers and language users. In this talk we will focus on live modeling, one of the two main topics that we explore within ALE. We will explain live modeling, demonstrate its benefits for language users, and present our recent work on implementing live modeling using constraint solving techniques. Our approach enables to automatically migrate the run-time state of an updated model based on declarative constraints defined by the language designer. We implemented this approach in the form of the Nextep meta-modeling language that uses the Z3 SMT solver as a back-end to infer a new run-time model that satisfies the declared constraints.