

Automated programming deals with automatically finding an implementation for a given black box description of a software module. In the last decade, automated programming achieved new attention in the area of automated software composition through state based planning and is currently a hot topic.

The purpose of this talk is to give an introduction to the task of automated software composition, discuss relevant subtopics, and to present our own approaches. The talk is divided into three parts. First, I explain differences between classical AI planning problems and automated software composition. Second, I discuss the applicability of automatization techniques in software composition. Third, I present our approaches that were developed across several subprojects. These are a mechanism for template based software composition on one hand, and the integration of composition algorithms and learning recommender systems on the other hand.