

# Model-based software development

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## **ABSTRACT**

Model-based software development (MBSD) is rapidly gaining popularity. There are two main approaches to MBSD: transformational and compositional approaches. The first has been initiated in nineties by creating UML -- a universal modeling language that has become a standard for software specification, and has influenced research in software engineering. One can say that UML has initiated model-driven software engineering (MDSE). The compositional approach has grown out from domain-specific language development. It uses visual specifications as input, and is represented by tools like MetaEdit+ and CoCoViLa. We give a survey of these approaches, and discuss in more detail the compositional approach, paying attention to combining compositional and object-oriented software specifications.