

Stefan Gruner: UML Use Case Diagrams and Formal Logic

In an informal presentation, Stefan Gruner has discussed some ideas about improving UML Use Case Diagrams by means of Formal Logic, for the sake of higher specification-precision and automatic derivation of test cases. The idea is based on the observation that for other sub languages of the UML family, such as Object Diagrams or State Charts, there are already approaches to precision-enhancement by Formal Methods. For the widely-adopted Use Case Diagrams, however, no such technique has yet been studied. Because this research project is just about to begin, there are yet no results to be presented. One of the first steps into this project will be to study the actual drawbacks and deficiencies of Use Case Diagrams, and then to identify a Logic that seems to be best-suited to close the gap.