Prolog for Verification, Analysis and Transformation Tools

(Invited Talk)

Michael Leuschel
Lehrstuhl Softwaretechnik und Programmiersprachen
Institut für Informatik, Universität Düsseldorf, Germany
leuschel@hhu.de

We examine the use of the Prolog language for writing verification, analysis and transformation tools. Guided by experience in teaching and the development of verification tools like PROB or specialisation tools like ECCE and LOGEN, and present an assessment of various aspects of Prolog and provides guidelines for using them. We show the usefulness of a few key Prolog features. In particular, it discusses how to deal with negation at the level of the object programs being verified or analysed.