



Universidad Nacional de San Luis
República Argentina

Formal Foundations for Semi-formal Notations

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Asesor: Chris George

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Tesis de Maestría en Ingeniería del Software



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Abstract

This report presents the semantics for UML class diagrams by using the RAISE Specification Language (RSL) as a formal basis. Property verifications of the model described by the UML class diagram can take place on the corresponding RSL specification by using reasoning techniques supported by the RAISE method. An automated tool that implements the translation and the abstract syntax in RSL for the RSL-translatable class diagrams are also reported.

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Ana Funes is a teaching assistant at the Department of Computer Science of the National University of San Luis, San Luis, Argentina. Her research interests include formal techniques for Object Oriented development and the use of formal methods for specification. She was a fellow at the International Institute for Software Technologies of the United Nations University (UNU/IIST) in Macau, from September 2001 to May 2002, where she worked on this thesis under the supervision of her adviser Chris George.

Chris George is a Senior Research Fellow at UNU/IIST, 1 September 1994 - 31 August 2003. He is one of the main contributors to RAISE, particularly the RAISE method, and that remains his main research interest. Before coming to UNU/IIST he worked for companies in the UK and Denmark.