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Tutorial: Modeling and Analysis with the User Requirements Notation 2.0: Features, Goals, and Scenarios (T07)

Tuesday, September 13, 2016 (Full-day)

<http://re16.org/pages/conference/tutorials/#T07>

The User Requirements Notation (URN), standardized by ITU-T in 2008 with extensive improvements in 2012, offers two complementary views for modeling requirements including features and business processes: GRL (the Goal-oriented Requirement Language) for stakeholder goals, features, and indicators, and UCM (Use Case Maps) for scenarios and high-level architectures. This tutorial first gives an introduction to the basic concepts and notations of URN, together with a comprehensive analysis approach to requirements modeling, combining both views. Illustrative examples are demonstrated with jUCMNav, a mature Eclipse-based environment that supports URN and combined goal-scenario capabilities.

The second part of the tutorial focuses on indicators (a recent concept in the standard that makes real-life measures available for reasoning within URN models), metadata and user-defined constraints for profiling URN to specific domains, and on the latest integration of feature model analysis into a holistic URN reasoning framework. These powerful mechanisms enable advanced and yet concise modeling in a wide range of application domains. Throughout the tutorial, participants will do exercises to deepen their understanding of URN.



Daniel Amyot is Professor at the University of Ottawa, with 160+ publications related to his research areas: requirements modeling and analysis with goals, scenarios, features and aspects; business process management; software engineering; regulatory compliance; and medical informatics. Daniel co-edited with Gunter Mussbacher all versions of the URN standard, and he also leads the development of an open-source Eclipse plug-in (jUCMNav) for the creation, analysis, and transformation of URN models. Daniel, who was General Chair of RE'15, has given numerous tutorials and invited presentations on various topics related to URN at international conferences, at ITU-T, at departmental seminars, and in government and industry events (<http://www.eecs.uottawa.ca/~damyot/>).



Gunter Mussbacher is an Assistant Professor at McGill University, with 100+ publications related to his research areas: model-driven requirements engineering with goals, features and scenarios; modularity in modeling; concern-driven development and reuse; and sustainability engineering. Gunter co-edited with Daniel Amyot all versions of the URN standard, and contributes regularly to jUCMNav (an open-source Eclipse plug-in for URN modeling). Gunter is an organizer and PC member for numerous conferences and workshops (e.g., RE, MODELS, SLE, MoDRE, MOMO, MiSE, SAM, SDL Forum) and has given many tutorials and invited talks on various topics related to URN at international conferences, at departmental seminars, and in government (<http://www.ece.mcgill.ca/~gmussb1/>).