Keynote talks

**Keynote 1**

Bran Selic, **IBM Canada**

**Title**
From Model-Driven Development to Model-Driven Engineering

**Abstract**
The adoption of model-driven methods for software development is rapidly gaining momentum, stimulated greatly by the emergence of new modeling language standards and corresponding tools. The ability of models to highlight the important aspects of a system while abstracting away the irrelevant bits provides a very effective means of coping with the often overwhelming complexity of modern software systems. However, model-driven development (MDD) is still deemed inappropriate for real-time and embedded software by many practitioners even though the complexity of their systems often exceeds that encountered in other domains. One of the reasons for this is that many early software modeling languages disregarded issues that were critical to this domain, such as the need to accurately represent concurrency and time. In this talk we describe state-of-the-art developments in modeling languages and technologies that overcome such shortcomings, enabling thereby an engineering-oriented style of MDD. This has proven effective not just for the development of real-time software but also for designing complex systems of systems.

**Short Biography**
Bran Selic is an IBM Distinguished Engineer and an adjunct professor of computer science at Carleton University in Ottawa, Canada. He has over 30 years of experience in designing and implementing large-scale industrial systems in telecom, aerospace and robotics. Bran pioneered the application of MDD and object-oriented methods in real-time software and is the author of a reference text on this topic. At IBM he is responsible for defining the strategy for systems development tools being developed by the IBM Rational brand. Bran is also the chair of the OMG task force responsible for maintaining the UML 2 standard. Please check in [http://www-306.ibm.com/software/rational/bios/selic.html](http://www-306.ibm.com/software/rational/bios/selic.html) for additional information on Bran Selic.