

## ***“Designing Software Tools at Autodesk Revit”***

March 11, 2011  
12:30 - 2:00pm  
Room 7-431

### **Lira Nikolovska**

Principal Designer  
Autodesk

#### *Abstract:*

How are software tools designed and developed? This case study will address the design research methodologies behind the making of a parametric, conceptual modeling design environment in an existing Building Information Modeling (BIM) platform. The challenge was to understand user requirements about conceptual design workflows, and to build a fully associative and parametric 3D modeler where geometry is created, manipulated, and parameterized in a manner approachable by a larger audience of architects and designers. By simplifying the interface, the team was able to solicit specific feedback about new tools and workflows without the overhead or pre-conceptions associated with using the existing software platform.

#### *Bio:*

Lira Nikolovska is a Principal Designer at Autodesk Revit, focusing on interaction and UI design for conceptual modeling, surface rationalization, adaptive components etc. She holds Ph.D. in Design and Computation from MIT Architecture and was member of the Computing Culture Group at the MIT Media Lab. Prior to joining Autodesk, she worked at the Strategic Design department at Philips Design in Netherlands, Philips Research Labs in Briarcliff NY, and taught at RISD and TU/Eindhoven. She curated the SIGGRAPH 2008 Design and Computation gallery and was SIGGRAPH 2010 Chair of Art Papers / Leonardo MIT Press guest editor.