

The logo for RENO 2008 SMALLTALK SOLUTIONS features a blue and white circular graphic with a stylized 'R' and 'S' shape. To the right of the graphic, the text 'RENO 2008' is stacked above 'SMALLTALK SOLUTIONS' in a large, bold, white sans-serif font.

RENO 2008 SMALLTALK SOLUTIONS

Agenda Update!

Title: Implementing programming languages for fun and profit with OMeta (Keynote)

Speaker: Alessandro Warth

Affiliation: Viewpoints Research Institute and UCLA

Time: Saturday at 10:30 (replacing David Simmons from Microsoft)

Abstract:

Adele Goldberg said that "When [Smalltalk] is used to describe an application system, the developer extends Smalltalk, creating a domain-specific language", but this only goes so far. In practice, Smalltalk applications are littered with implementation details that break the abstraction that the programmer was trying to create. (Think of while-loops, for example.) Implementing "real" domain-specific languages --- the kind end-users might use to script our applications --- requires much more time and effort. Or does it?

In this presentation, I will introduce OMeta, a tool that brings programming language implementation within the reach of any programmer, and explore OMeta's metaprogramming capabilities in the contexts of JavaScript and Smalltalk.

Speaker bio:

Alessandro Warth is a researcher at the Viewpoints Research Institute, where he is working on the "Steps Toward the Reinvention of Programming" project, and also a Ph.D. candidate at UCLA. His current research interests include tools for rapid language prototyping, and improving modularity in dynamic languages. He received a B.S. in Computer Engineering from the University of Miami in 2000, and an M.S. in Computer Science from UCLA in 2006.