The Frontiers of Data Programmability

Sergey Melnik

Google, Inc.
Seattle-Kirkland R&D Center, USA

melnik@google.com

Abstract: Simplifying data programming is a core mission of data management research. The issue at stake is to help engineers build efficient and robust data-centric applications. The frontiers of data programmability extend from longstanding problems, such as the impedance mismatch between programming languages and databases, to more recent challenges of web programmability and large-scale data-intensive computing. In this talk I will review some fundamental technical issues faced by today's application developers. I will present recent data programmability solutions for the .NET platform that include Language-Integrated Querying, Entity Data Model, and advanced techniques for mapping between objects, relations, and XML.