

NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

C S S E M I N A R

Title: **An Overview of Data Completeness Assessment Techniques**

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Chaired by: Dr Senellart, Pierre Paul, Visiting Senior Fellow, School of Computing
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Abstract:

In this talk I will give an overview of recent work on data completeness assessment. Data completeness is an issue in many applications where data from multiple sources is regularly used for query answering. For technical or conceptual reasons, data may be temporarily unavailable or generally nonexistent, and hence, it becomes a problem to assess which query answers can still be trusted.

I will particularly focus on the approach presented in [1], where we proposed a natural class of completeness patterns, expressed by selections on database tables, to specify complete parts of database tables. I will discuss how an algebra for the manipulation of these patterns can be defined, how one can efficiently implement this algebra, and what the limitations of this algebra in terms of algorithmic completeness are.

[1] Identifying the Extent of Completeness of Query Answers over Partially Complete Databases; Simon Razniewski, Flip Korn, Werner Nutt and Divesh Srivastava; SIGMOD 2015

Biodata:

Simon Razniewski is an Assistant Professor (non-tenured) at the Free University of Bozen-Bolzano, Italy, where he obtained his PhD in 2014.

His research is centered on principles of data quality and data completeness assessment, and has been published at conferences such as VLDB, CIKM, SIGSPATIAL and SIGMOD. He spent research visits at UCSD, AT&T Labs-Research and Globalfoundries.

