Stony Brook University

Biomedical Informatics Grand Rounds

Janos Hajagos, PhD; *Chief of Data Analytics, Research Assistant Professor, Department of Biomedical Informatics, Stony Brook University*

From the OHDSI Common Data Model
to Large Scale Data Analytics

Wednesday, Mar 27, 2019 3pm—4pm
BMI Conference Room HSC-L3 Room 045

Abstract:

Data extracted from EHRs (Electronic Health Records) and administrative billing/claims systems are stored in different relational database schemas. Common Data Models (CDMs) are designed to align data from different sources into a single database schema for analysis. The OHDSI (Observational Health Data Sciences and Informatics) CDM is increasingly being used in informatics. I will introduce the OHDSI CDM and discuss how it maps coded data into source and mapped concepts. As an example, I will show the mapping of two different local sources into the OHDSI CDM. Once data is transformed into the CDM relational data model, it can be automatically transformed for building and testing machine learning models.

Bio:

Dr. Janos G. Hajagos is Chief of Data Analytics and Research Assistant Professor in the Department of Biomedical Informatics at Stony Brook University. His research is focused on building improved analysis pipelines for health care data.

Objectives:

- Understand why we need to have common data models (CDMs) in health care
- Understand what the strengths of OHDSI (Observational Health Data Sciences and Informatics) CDM are
- Understand how OHDSI maps concepts from different vocabularies into a source concept and mapped concept
- Describe the process in which data from HealtheIntent and Health Facts are mapped to the OHDSI CDM
- Describe how data stored in a relational database is mapped to JSON and HDF5 matrix format

CME Credit Available

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