

Biomedical Informatics Grand Rounds

Wednesday, September 11, 2024

3:00 pm – 4:00 pm



Writing Middleware to Accelerate the Utilization of Health Care Data

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Remote Access

Join Zoom Meeting <https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09>

Meeting ID: 956 1719 7636 Passcode: 924293

Bio: Dr. Janos G. Hajagos is Chief of Data Analytics and Research Assistant Professor in the Department of Biomedical Informatics at Stony Brook University. He is the lead data scientist across several quality initiatives at Stony Brook Medicine and for the Suffolk Care Collaborative's DSRIP award. Before his current position he was the Associate Director of Data Computation in the Division of Applied Informatics. There he was integral in several data analytic applications and the development of production web applications for the New York State Department of Health's Medicaid Program. Dr. Hajagos has published and presented his informatics work at a range of national conferences. He received his PhD in Ecology and Evolution in 2005 from Stony Brook University.

Abstract: There has been a growth over the last five years in analytic portals that make EHR (Electronic Health Records) data accessible for secondary research use. Middleware is the behind the scenes software which extracts, transforms, and loads the data. We will examine three challenges in writing middleware: 1) generating synthetic data for testing, 2) extracting facts in near real-time from HL7 messages, 3) transforming CDA XML documents from mobile health devices and patient portals to the OHDSI CDM (Common Data Model).

Educational Objectives:

1. Understand how low-level flows of data flows can be captured to generate insight into clinical health
2. How Synthea can be used to generate synthetic health data and how it is mapped mapped to the OHDSI CDM for data pipeline testing
3. Understand how HL7 messages that contain radiology documents can be mined in near-real time to improve the identification of lung nodules
4. Understand how data captured by mobile health devices and through patient portals can be mapped to the OHDSI CDM

Disclosure Statement: The faculty and planners have no relevant financial relationship with ineligible companies, whose primary business is producing, marketing, selling, reselling, or distributing health care products used by or on patients.

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