S4: Distributed Computing, TranSMART, & Big Data

Session Summary

The use of i2b2 in developing distributed computing and specialized i2b2 Hives. This is the direction that that the i2b2 team is working towards with tranSMART in order to increase its support for special i2b2 instances that support Genomics, Imaging science, and Big Data Analytics that can be linked together in a distributed network.

Presenters (6)



Paul Avillach, MD, PhD

Assistant Professor of Pediatrics

Children's Hospital Boston

Assistant Professor of Biomedical Informatics

Harvard Medical School

Assistant Professor in the Department of Epidemiology

Harvard School of Public Health



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Corporate Manager II

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Shawn Murphy, MD, PhD

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Associate Professor of Neurology

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Lori Phillips, MS

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Griffin Weber, MD, PhD

Research Associate in Biomedical Informatics

Harvard Medical School

Associate Professor of Medicine

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Presentations (4)

Presentation 1: i2b2 / tranSMART BD2K PIC-SURE RESTful API

Presenter: Paul Avillach



Presentation 2: Healthcare System Dynamics

Presenter: Griffin Weber, MD, PhD

- HSD Cycles in Clinical Data Using HSD to Predict Outcomes
- Using HSD to Derive Normal RangesAdding HSD to i2b2



Presentation 3: Using Big Data to Create an Information Commons with the i2b2 Infrastructure

Presenter(s): Christopher Herrick and Lori Phillips

- Information Commons
 i2b2 Cell: The Canonical Software Module
 Distributed Queries: Central and Remote Hives



Presentation 4: Developing Specialized Hives to Contribute to the i2b2 Ecosystem

Presenters: Shawn Murphy and Mike Mendis

- Distributed Query System links together Specialized i2b2 Hives
 Using BRISSKIT to assemble a new Hive very quickly
 Patient Information Commons

