Data-Driven Education: Some opportunities and Challenges

Rakesh Agrawal Data Insights Laboratories ragrawal@acm.org

ABSTRACT

A program of study can be viewed as a knowledge graph consisting of learning units and relationships between them. Such a knowledge graph provides the core data structure for organizing and navigating learning experiences. We address two issues in this talk. First, given a knowledge graph, how can we use data mining to identify and correct deficiencies in a knowledge graph. Second, how can we use data mining to form study groups with the goal of maximizing overall learning. We conclude by pointing out some open research problems.