Scholarly Big Data Knowledge and Semantics

C. Lee Giles
Pennsylvania State University
University Park, PA 16803, USA
giles@ist.psu.edu

Abstract
With collections of scholarly documents having many millions of metadata such as authors, citations, tables, figures, equations, formulae, etc., how can we make sense of what this data means and how it can be effectively utilized? What knowledge or semantics should be associated with such data and how will it connect to other knowledge resources? One approach is knowledge structures or vaults, but which will be the most effective, easiest to implement, and use?

Keywords
big data; digital libraries; semantic search