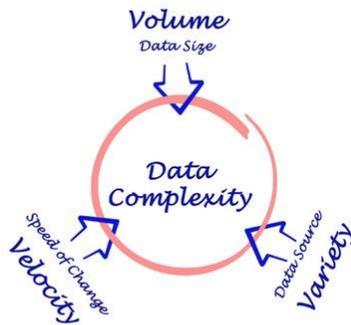


Big Data Management and Analytics Systems



Spring 2019

CIS 4930/CIS 5930

Instructor:

Professor Michael Gubanov*

gubanov.cs.fsu.edu

Location, Time:

TR: 2:00-3:15 p.m.

LOV 301



Big Data broadly refers to Systems, Algorithms, and Infrastructure used to efficiently access and manage large-scale and heterogeneous data sets (e.g. Web). Big Data challenges are often classified using 3V's: Too much data (Volume), data are coming from too many sources (Variety), or data are appearing too fast (Velocity) [Stonebraker NIST'10].

In this course, I am planning to briefly review classic Data Management foundations and systems and then switch gears to large-scale data management, fusion, and complex analytics systems and infrastructures. We will learn how to access, search, visualize and manipulate Big Data efficiently. To gain valuable hands on experience student teams will work on class projects (depending on TA assignment). Project teams from the 2017 offering of this course at U Texas landed 4 publications in a major conference and went to present to Boston, MA .

Who should take the course?

Computer Science Graduate and upper-level undergraduate students in Computer Science interested in state-of-the-art Big Data and Analytics Systems. Undergraduate students should have passed COP 4530. Computer Science Graduate students should have taken an equivalent course.

*Assistant Professor Michael Gubanov joined Florida State University (FSU) in 2018. Before, he spent 2 wonderful years at *University of Texas* as an (Endowed) Assistant Professor. He earned his Ph.D. in Computer Science and Engineering from the *University of Washington* (UW) and did his postdoctoral research at *Massachusetts Institute of Technology* (MIT). He also worked at *IBM Almaden Research Center*, *Google*, and *Microsoft Research*. Results of his work were productized as a part of *Google Product Search* (<http://www.google.com/shopping>), *IBM Clio*, and *Microsoft Bing! Local* (<http://www.bing.com/local>). He is a recipient of a NASHP Young Investigator Award, 2015; IEEE Sensors Best Paper Award, 2016; IEEE ICDE *Best Paper Award*, 2017, ACM SIGMOD *Research Highlight Award* 2018, co-author of more than 40 peer-reviewed Computer Science publications.