# The Byrne Seminars – Fall 2014 Data: What Is It Good For? (Absolutely Something)

Tu 10:20–11:40 AM, SEC–211 9/2/2014 – 11/4/2014

## **Instructors**

Prof. Waheed U. Bajwa http://www.rci.rutgers.edu/~wub1/ 723 CoRE (Busch Campus) Tel. 848-445-8541

Prof. Anand D. Sarwate
http://www.ece.rutgers.edu/~asarwate/
517 CoRE (Busch Campus)
Tel. 848-445-8516

#### Means of Communication

E-Mails: waheed.bajwa@rutgers.edu and asarwate@ece.rutgers.edu

Twitter: @SigProcessing and @ergodicwalk

Office Hours: By appointment

Sakai: https://sakai.rutgers.edu/portal/site/b7d0e1a6-afb5-48ea-b176-02e766283682

## **Grading Policy**

The Byrne seminars are graded on a pass/no credit basis. In order to ensure you receive the pass grade, you are expected to attend at least 9 out of the total 10 seminars, keep up with the reading assignments, engage in class discussions, and complete a team term project.

### **Initial Course Outline**

- Week 1—Introduction to the course and the concept of "data"
  - Instructors and class introduction
  - Brief overview of the course
  - Class discussion about key data-related concepts
  - Introduction to the flowchart of "data science"
  - Next week's reading assignments
    - 1. General Overview on Wikipedia: http://en.wikipedia.org/wiki/Data\_science
    - 2. Kenneth Neil Cuckier and Viktor Mayer-Schoenberger, "The Rise of Big Data," Foreign Affairs, May/June 2013 (*PDF available on Sakai*).
    - 3. Thomas H. Davenport and D.J. Patil, "Data Scientist: The Sexiest Job of the 21st Century," Harvard Business Review, October 2012.

- 4. Chris Anderson, "The End of Theory: The Data Deluge Makes the Scientific Method Obsolete," Wired, June 23, 2008 (Available at: http://archive.wired.com/science/discoveries/magazine/16-07/pb\_theory).
- Week 2—Potentials and perils of data science
  - Data science and the various stakeholders
  - Discussion about the reading assignment
- Week 3–10—To be finalized based upon the first two weeks of class discussions.