Arch 4050/6050/4204/5204
Eric Sauda, Storrs 241, ejsauda@uncc.edu
Tuesday, 2:00 – 4:45

Students can enroll as either a history elective or an architectural elective.
Enrollment is limited to 6 students.
It is strongly advised to consult with the professor before enrolling.

Digital Theory: Data, Architecture and Design
“I began this article by saying that quantitative data are useful because they are independent of interpretation; then, that they are interesting because they demand an interpretation; and now, most radically, we see them challenge existing interpretations, and ask for a theory, not so much of ‘the’ novel, but of a whole family of novelistic forms. A theory of diversity.“
Franco Moretti, Graphs, Maps, Trees: Abstract Models for Literary History

Premise
It is by now obvious that the flow of data will become a permanent feature at all spatial levels from the most personal and private to the largest and most public. This transition has been the subject of a long historical discourse as well as active research by planners, designers and computer scientists. This class will develop an understanding of the historical literature that theorizes the influence of “big data” to design and urbanism, and use advanced methods of data acquisition and analysis to understand new forms of architecture and contemporary urbanism.

Objectives & Content
We will begin with intensive reading of theoretical and practical perspectives on data and space. We will then proceed to propose research questions that can be answered by the analysis of communication and data. We will use the API (application Programming Interface) from Twitter and Google to collect data. We will use Topic Modeling and Event Modeling to analyze this data. Students will be part of a research team including computer science students, data science faculty and

Upon completing this course, a student will:
• Understand the discourse concerning the influence of communication and data on space.
• Be able to collect large amounts of data.
• Be able to analyze and interpret data as it relates to ideas of space.

Texts
• Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places, Ed Soja
• Telecommunications and the City, Stephen Graham and Simon Marvin
• Mobile Interface Theory, Jason Farman
• Understanding Media: The Extensions of Man, Marshall MacCluhan
• The Aesthetics of Disappearance, Paul Virilio
• Me++: The Cyborg Self and the Networked City, William Mitchell

Assignments
Working in conjunction with the Data Science Center in Computer Science, we will be collecting tweets for a 6 month period for New York City and Los Angeles. We will be publishing two articles in national and international journals based upon this archive of tweets.

Students will join a team and be involved in all aspects of the research and writing of the articles, and will be credited in the publication.