## **GEOGRAPHY 509: Geospatial Semantics**

Fall 2017, 3 credits, Dr. Yingjie Hu (yhu21@utk.edu) (This course is open to both undergraduates and graduates)









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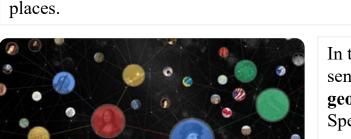
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## Pigeon Forges

Knoxville

City in Tennessee

Knoxville is a city in the U.S. state of Tennessee, and the county seat of Knox County. The city had an estimated population of 185,291 in 2015 and a population of 178,874 as of the 2010 census, making ... Wikipedia



In today's **Big Data** age, many datasets present a

natural association between geographic locations and textual descriptions. Examples include geotagged

social media data (e.g., geotagged Tweets), geotagged

Web pages, and general human descriptions about

The Knowledge Graph

No programming background is required. We will start step by step. Some familiarity with R and ArcGIS will help.

In this course, we will explore how to make sense of these geo-text data by integrating geospatial and semantic analysis.

Specifically, we will:

- Introduce the fundamental concepts in geospatial semantics
- Learn the basic text mining techniques using R and Stanford NLP Toolkit
- Learn the basic geospatial analysis and mapping using R and ArcGIS software
- Learn some applications of geospatial semantics