

GEG 590/645/ARC 685

URBAN ANALYTICS & GEOVISUALIZATION

Section: HI
Mondays/Wednesdays
3:35 pm – 4:50 pm

Dr. Sarbeswar Praharaj

Course Outline

Cities are producing vast amounts of data due to growing digitization in society and the built environment. This course will demonstrate how diverse sources of urban data can be collected, analyzed, and communicated through computation and visualization tools. You will be exposed to a range of cutting-edge datasets typically encountered by professional analysts and gain hands-on experience in exploring complex data using web-based mapping, dashboard design, and story mapping techniques. We will further explore applications of these tools through our guest speakers from local governments. The course will prepare you to communicate data with confidence and engage the broader public with your insights. You will not only design visualization but also learn to evaluate how users engage with visual interfaces. Overall, you will gain a critical appreciation of the potential for urban analytics and visualizations to inform community solutions and policy-making.

Skills you will gain:

- Data-driven Decisionmaking in the Urban Context
- Web-based Mapping
- Data Dashboard Design
- Story Mapping
- Visual Interface Design
- Data Communication
- Engaging Public with Data
- Data Ethics & Governance