COURSE DESCRIPTION:
This course will introduce recent advancements in research and development related to the analysis and use of a large quantity of multimedia data (e.g., images, videos, social media). Every day, we create 2.5 quintillion bytes of data, a substantial portion of which is multimedia data. Multimedia data has been used in a number of emerging applications, including social media, Web information retrieval, robotics, autonomous vehicles, smart cities, forensics, biomedicine, and art history. There are many challenges and opportunities for information engineers, including retrieval, analysis, visualization, understanding, and mining of the data. Special emphasis will be placed on making sense of data collected from different sources and of different modalities. Students will have opportunities to gain hands-on experience through developing their own projects or be a part of a team-based development project.

BOOK:
None.

TARGET AUDIENCE:
This course is intended for those who have a passion about developing information systems for challenging real-world problems. Junior and senior undergraduate students in IST and other majors with some programming training can take this course. This course might also be a 400-level option for IST graduate students.

EVALUATION METHODS:
A combination of class participation, presentations, and term projects will be used to assess the learning progress.