DATA SCIENCES (DS)

DS 540: Multimedia Analytics

3 Credits

This course covers all aspects of multimedia analytics including the foundations, representations, implementations, and applications of extracting patterns from images, video, audio, and related context information for the purpose of prediction, automated discovery, and decision-making. Specific topics to be covered in the course include an overview of multimedia systems, multimedia data representation and compression, image and video analysis, audio analysis, multimedia information retrieval, and advanced topics in multimedia analytics. Emphasis will be placed on the integrative approach to multimedia analytics, in which the systems can benefit from the synergy of leveraging multiple sensing modalities, including audio, image, video, text, and more. The objective of the course is to provide students with a wide range of models and applications that are relevant to their research and development in modern multimedia analytics systems.

reommended prep: IST 510