Brooklyn College
Department of Computer & Information Sciences

CISC 7610 [*717.5X] Multimedia Databases

37½ hours plus conference and independent work; 3 credits


Syllabus:

Week 1: Introduction to multimedia databases. Issues related to multimedia data types.

Week 2: Review database approaches. Relational databases, especially SQL. Object-oriented databases.

Week 3: Multimedia data and data formats. Perceptual issues.

Week 4: Approaches to multimedia databases. Pros and cons of extended relational versus object-oriented multimedia databases.

Week 5: Querying multimedia. Classification problem.

Week 6: Modeling multimedia databases. Universal modeling language.

Week 7: Using multimedia metadata. Metadata creation and extraction.

Week 8: Multimedia database architectures and performance issues.

Week 9: Distributed multimedia databases. Internet distribution. Delivery methods. Quality of service.


Week 11: Approaches to indexing and querying text documents. Information retrieval.

Week 12: Image processing, analysis, and understanding, applied to multimedia databases.

Week 13: Continuous media processing and analysis. Storage and disk scheduling issues.

Week 14: Multimedia database applications.

Suggested Textbook:

Bibliography:

Website Resources:
Managing Multimedia Databases (http://vision.ece.ucsb.edu/multimedia/)
Multimedia Databases in Perspective (http://www.informatik.uni-trier.de/~ley/db/books/collections/ApersBH97.html)
Multimedia Databases Through the Looking Glass (http://www.dbpd.com/vault/9705davd.htm)