Data Warehouses and Data Integration Services: Chapter Scope

- Data Integration (in general)
  - Virtual Views
  - **Materialized Views**
  - Hybrid
- Data Warehousing and OLAP
  - Design, modeling and architectural issues
  - ETL (Extract-Translate-Load)
  - Maintenance
  - Traditional data management issues (indexing, query processing, etc)
- Data Mining (very briefly) ?
  - Is it just one possible application that is more easily/effectively implemented in presence of a DW?

- Cs227dataint Mailing List: http://list.cs.brown.edu/mailman/listinfo/cs227dataint
- Cs227dataint Team Web Page: http://members.home.com/cconvey/cs227

Small Topics Under Current Investigation

- Maintenance of materialized views
- Query/View languages and processing
- ETL (Extract Translate Load)
  - Semantic/Syntactic heterogeneity issues
  - Change detection in original data sources
  - Tools and languages that facilitate ETL
- Overall architectures of DW/OLAP systems
- Metadata management for DW/OLAP
- Indexing
- Front end OLAP querying tools
- RDBMS schemas used in DW/OLAP
- Data Mining in relation to DW/OLAP systems