## **Major Topics of Lectures**

- Background, overview of text retrieval & analysis; relevant math
- Overview of statistical language models (LMs)
- N-gram LMs
- Language Models for Information Retrieval
- Mixture LMs (PLSA, LDA)
- State-Space LMs (Hidden Markov Models)
- Contextualized LMs
- Learning to rank
- Neural language models (word embedding, deep learning for IR)

