Experimental Information Retrieval

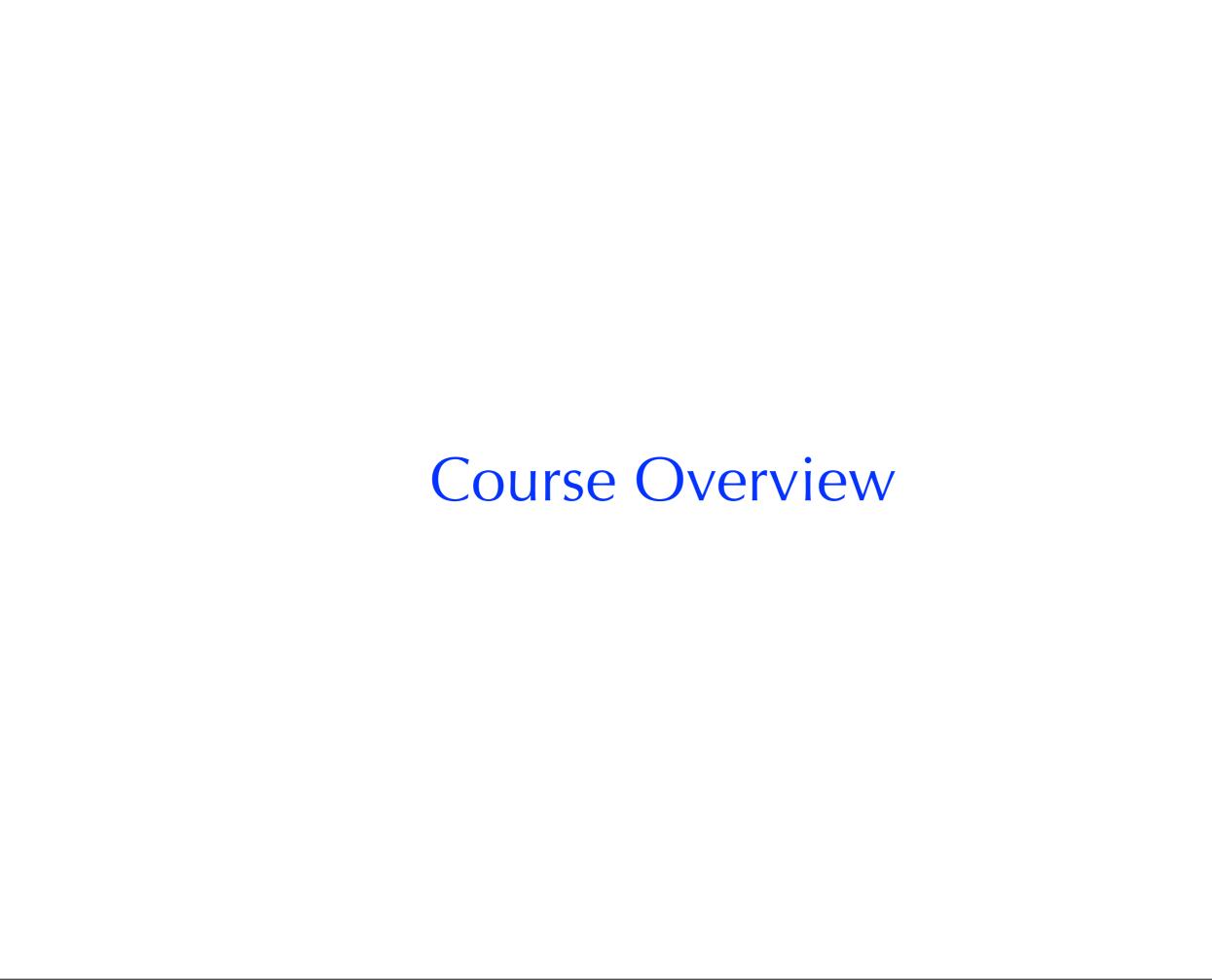
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January 11, 2017

Introductions

- Hello, my name is ______.
- However, I'd rather be called _____. (optional)
- I'm in the _____ program.
- I'm taking this course because I want to ______.





- Clinical Decision Support
- Goal: linking a medical case with biological studies relevant for patient care
- Input: A narrative describing a medical case: (1) description, (2) summary, and (3) note
- Output: A ranked list of documents containing information about the (1) diagnosis, (2) tests, and (3) treatment plan associated with the case

- Contextual Suggestion
- Input: User profile + location + "Entertain me"
- User profile: ratings on previously recommended activities/venues from a different location + demographic info + "trip type"
- Output: A ranked list of suggested activities/venues in the given location

- Dynamic Domain
- Input: Query describing complex, multi-faceted topic
- Output: Multiple rounds of results covering the different subtopics of the topic

- Live QA
- Input: Natural language question (possibly recommendation-based)
- Example: "My 105 lb. lab mix just ate a whole box of raisin bran and is acting normal. Should I be worried?"
- Output: 1000-character answer in less than a minute (and optionally, a question summary)

TREC 2016

tracks

- OpenSearch
- Goal: Tune and evaluate systems using real users
- Procedure:
 - Each participating system produces results for a common set of queries
 - When a "real user" enters a query, the broker interleaves the results from different systems
 - The user's clicks and skips are communicated to each participating system
 - After an tuning period, systems are re-evaluated

- Real-time Summarization
- Input: Query
- Real-Time Output: At most 10 relevant and nonredundant tweets per day (as early as possible)
- Email Digest Output: At most 100 relevant and nonredundant tweets per day (at the end of the day)

TREC 2016

tracks

- Task
- Input: Query describing topic (and Freebase IDs for entities in the query)
- Task Understanding: Ranked list of up to 1000 key phrases describing <u>all</u> sub-tasks the user is trying to accomplish
- Task Completion: Ranked list of up to 1000 documents with relevant information about sub-tasks
- Ad-hoc search: Ranked list of up to 1000 documents with relevant information

- Total Recall
- Input: Query describing topic + document-at-time relevance feedback
- Output: One document at a time until the system decides to stop based on the feedback