Outline

Introducing Touché Shared Task (Argument Retrieval)

☐ Forming project groups

Registering students at Discord (Similar to Skype)



Argument Retrieval

Argument and Argumentation

Argument:

- □ A conclusion (claim) supported by premises (reasons). [Walton et al. 2008]
- □ Conveys a stance on a controversial topic. [Freeley and Steinberg, 2009]

Conclusion Argumentation will be a key element of conversational agents.

Premise 1 Superficial conversation ("gossip") is not enough.

Premise 2 Users want to know the "Why" to make informed decisions.

Argumentation:

- Usage of arguments to achieve persuasion, agreement, . . .
- Includes rhetorical and dialectical aspects.

Argument Retrieval

Shared Tasks

Task 1: Supporting argumentative conversations

□ Scenario: Users search for arguments on controversial topics

□ Task: Retrieve "strong" pro/con arguments on the topic

□ Data: 300,000 "arguments" (short text passages)

Task 2: Answering comparative questions with arguments

□ Scenario: Users face personal decisions from everyday life

Task: Retrieve arguments for "Is X better than Y for Z?"

□ Data: ClueWeb12 or ChatNoir [chatnoir.eu]

- Run submissions similar to "classical" TREC tracks
- □ Software submissions via TIRA [tira.io]

Milestones

- □ Literature Research Find relevant research papers to the task
- □ Data Analysis Descriptive statistics, highlighting variables of interest.
- Technology Stack Decide upon the software libraries you are going to use.
- □ Vertical Prototype Working prototype with a basic retrieval model.
- □ Refined Prototype Prototype that uses and advanced/refined retrieval model.
- Deployment on Tira
 We will give a tutorial on Tira during the semester
- □ Evaluation Evaluate the results of your retrieval models.
- Documentation Write a README; incl. all commands for deployment.
- □ Report Write the final report of up to max. 10 pages.

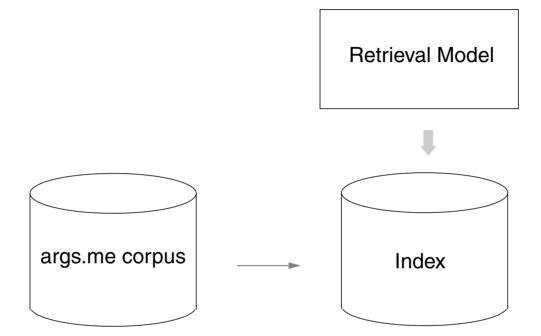
Shared Task1: Topic Example

Topic ID: 0001

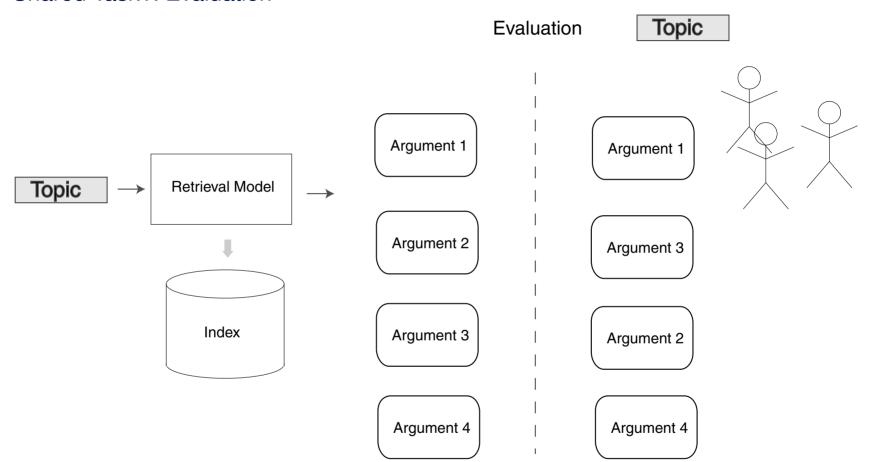
ban abortion Query:

Description: You are a conservative trying to persuade your liberal colleagues of a ban of abortions. You are primarily looking for arguments supporting your stance, but are somewhat interested in

Shared Task1: Indexing



Shared Task1: Evaluation



Shared Task1: Related Work

- Data Acquisition for Argument Search: The args.me Corpus
 Statistics and description of the corpus.
- Building an Argument Search Engine for the Web
 Main steps of designing an argument search engine
- Argument Search: Assessing Argument Relevance.
 Evaluation of retrieval models for argument search

Shared Task2: Topic Example

Topic ID: 01

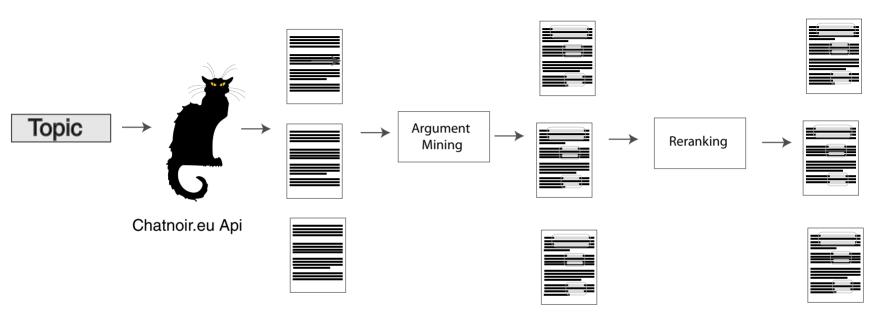
Query: Which is better, laptop or desktop?

Description: A user searches for information to compare such ideas as sex and love. It is important that the differences of the two subjects are discussed.

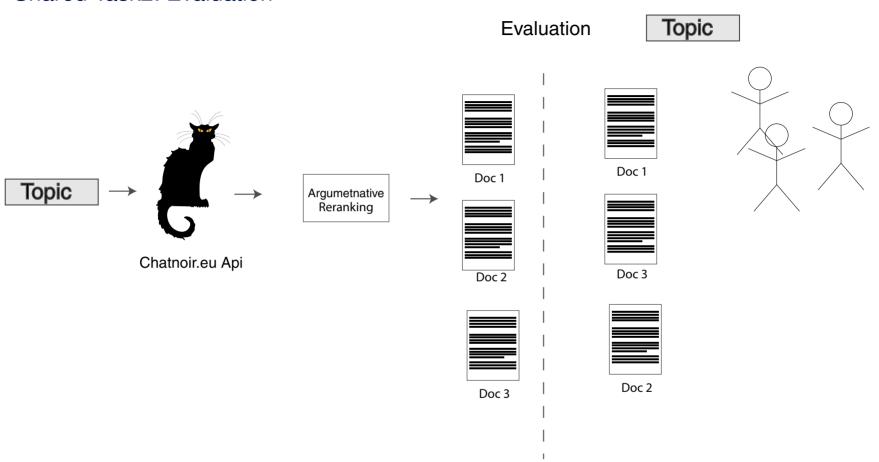
Narrative: Relevant documents relating to this issue will discuss both definitions of the subjects as well as their contrasting. Documents which include only definitions and descriptions of the subjects without their clear comparison are not relevant. Documents containing definitions and comparison of other subjects are re-

levant as long as the main focus is on the given topic.

Shared Task2: Argumentative Reranking



Shared Task2: Evaluation



Shared Task2: Related Work

- Answering Comparative Questions: Better than Ten-Blue-Links?
- Webis at TREC 2018: Common Core Track.
 - A description of an argumentative raranking approach
- □ TARGER: Neural Argument Mining at Your Fingertips.
 - An online tool to mine arguments from a text