Agenda

1. Organization

2. Project Info

3. Project groups

Organization
Communication

❑ Slides, Announcements & Materials will be available at

temir.org/teaching/information-retrieval-ss20.html

❑ Online sessions will take place on BigBlueButton (a video conferencing system)[1]

❑ Communication channels are Mail and Discord

   – Official announcements via Mail (check your student mails regularly!)

   – Discord for Q&A and group communication [2]

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[1] https://conf.informatik.uni-leipzig.de/
[2] server *"irlecture"*, see mail for access code

Organization
Planned Sessions

- ❑ Two Lab classes are planned:
    - – Introduction to Scientific Writing
    - – Introduction to Docker and Tira

- ❑ Additionally, there are voluntary Q&A sessions every two weeks

- ❑ Classes will take place as soon as the university is open again

- ❑ Sessions will take place on Discord and BigBlueButton until then

- ❑ Check the course page for more info on dates!

Lab Project
Overview

> *"Build a search engine that retrieves strong arguments for and against a given controversial issue."*

❑ Objective: this semesters' IR lab is centered around argument retrieval

❑ Deliverables: as part of the lab, you will build an argument retrieval system, deploy it on the Tira platform and hand in a written summary of your work

❑ The lab will be organized as part of a shared task, using the same infrastructure and resources as leading researchers in the field

Lab Project
Details

- ❏ What should an argument retrieval system do?
  - – Enable users search for arguments on controversial topics
  - – Retrieve "strong" pro/con arguments on a given topic

- ❏ What is an argument?
  - – A conclusion (claim) supported by premises (reasons). [Walton et al. 2008]
  - – Conveys a stance on a controversial topic. [Freeley and Steinberg, 2009]
  - – Example:

Conclusion	*Death penalty should be abolished.*
Premise 1	*It is morally wrong.*
Premise 2	*It is ineffective in accomplishing key goals in crime punishment.*

Lab Project
Shared Task

- ❏ A shared task is an open and friendly competition amongst researchers working on a common problem

- ❏ To make argument retrieval more accessible to the research community, Webis is organizing a Shared Task: Touché @ CLEF 2020 [touche.webis.de]

- ❏ the resources and infrastructure of this shared task will be made available for this lab

Touché @ CLEF 2020
1st Shared Task on Argument Retrieval

Alexander Bondarenko
Matthias Hagen
Martin Potthast
Henning Wachsmuth
Meriem Beloucif
Chris Biemann
Alexander Panchenko
Benno Stein

[touche.webis.de]

Lab Project
Resources

- ❏ Data
    - – Source dataset consisting of more than 300'000 arguments
      [Ajjour et. al., 2019]
    - – Training & evaluation datasets for argument quality and argument relevance
    - – Query dataset

- ❏ Material
    - – List of related papers as starting point for your own literature research

- ❏ Evaluation platform
    - – deploy your solution on tira.io for automated and reproducible evaluation

- ❏ Example
    - – the args.me search engine and its source code

Lab Project
Milestones

❑ Literature Research

    Find existing research relevant to the task.

❑ Data Analysis

    Take a closer look at the provided data, highlighting variables of interest.

❑ Technology Stack

    Decide upon the software libraries you are going to use.

❑ Vertical Prototype

    Build a working prototype with a basic retrieval model.

❑ Refined Prototype

    Build a prototype that uses an advanced/refined retrieval model.

❑ Deployment on Tira

    Build a containerized version of your software and deploy it on the Tira platform.

❑ Evaluation

    Evaluate the results of your retrieval models.

❑ Documentation & Report

    Write the final report. Provide a README for your sourcecode.

Project Groups

❏ You can work in groups of around 4 people

❏ There is a dedicated channel on the Discord server for finding groups

❏ If you assemble a group yourself, write a mail listing all group members (name & mail address) to us

❏ we will assign groups for everyone who did not get in touch by 21.04

❏ Each group will then receive:
  – a unique group name
  – a dedicated Discord channel
  – a Tira account and VM