# BioMedical NLP

Intro

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# BioMedical NLP

BioMedical NLP = part of the wider area of Artificial Intelligence for Medicine / bio-informatics

BioMedical NLP = the use of **NLP methods** for helping biology and medicine research, clinical practice, and adjacent areas

Many applications, niche topic in NLP research.

Useful for: doctors, patients, other actors in the medical system (insurance, policy makers); researchers, maintainers of resources used in biology/medicine research

Universal end goal: All in all, general end goal: **improving quality of life through understanding life processes.**

# Organization & grading

- 1 class every 2 weeks (10-12)
- 1 seminar each week (8-10)
- Research focused, latest findings in NLP, relying on conference and workshop publications
- Seminar: paper reading group!

Grading:

- team project (70%)
- seminar: review and present 1 paper (individual) (30%)

# Organization & grading

Materials: slides, book, conference/workshop proceedings

links: aclanthology

https://aclanthology.org/venues/bionlp/

https://aclanthology.org/sigs/sigbiomed/

https://aclanthology.org/venues/clpsych/

eRisk proceedings (https://erisk.irlab.org/)

# Paper reading group

- Each student will review and present a paper in BioMedical NLP research during the seminar
- About 2-3 presentations per session
- I will share a list of papers to choose from; or you can add your own
- Read the paper, write a review, send it to me before the seminar, talk about the paper at the seminar (30-40 minute discussion)
- I will make the first presentation + example review next week
- Paper list + scheduling of presentations (see MTeams files)

# Projects

Project topic list: open-ended (see MTeams Files)

Teams of 2-3 people, max 2 teams can approach the same topic

Team and project matching: (see MTeams Files)

Deliverables:

- implementation of a solution to a problem related to BioMedical NLP
- short paper explaining what you did (structure follows academic paper structure)
- presentation

# See you next week! 🙋