

סמינר בעיבוד שפה טבעית
Seminar in Natural Language Processing
236817
סמסטר ב', תשפ"א

מרצה:	ד"ר יונתן בלינקוב (belinkov@technion.ac.il)
מתרגל / בודק:	אין
שעות הרצאה:	ג' 10:30-12:30
דרישות קדם:	מבוא לעיבוד שפה טבעית; מערכות לומדות / למידה עמוקה
אתר הקורס:	https://webcourse.cs.technion.ac.il/236817/Spring2021
רישום	ידני: נא למלא טופס https://forms.gle/WBab9NS1mHDiaEDF6

Seminar in natural language processing. Topics vary by year. This is a seminar for advanced undergrads and graduate students who have prior background in natural language processing and would like to advance their knowledge and develop research skills.

With the advance of neural network approaches to NLP, several challenges have surfaced with their development and deployment. The 2021 iteration of the seminar will address two key challenges: a) **interpretability**, or how to open the black-box of neural NLP models, and understand their structure and their decisions; and b) **robustness**, or how to make models more robust to biases, spurious correlations, distribution shift, etc.

Interested students should fill out the following form: <https://forms.gle/WBab9NS1mHDiaEDF6>

Staff:

[Yonatan Belinkov](#), instructor (belinkov@technion.ac.il)

Office hours: Thursday 11:00-12:00

Learning outcomes:

By the end of this course, the student will be able to:

1. Present, discuss, and critically assess research papers in NLP.
2. Define a novel or existing research question, design a solution, and implement it.

Pre-requisites:

This is an advanced course that assumes background in NLP and machine learning, such as can be acquired via the following courses: 236299: Introduction to natural language processing, 236756: Introduction to machine learning, 236781: Deep learning on computation accelerators. Students without the official requirements will still be considered if they can demonstrate sufficient background.

Coursework:

The course will consist of reading and presenting papers. Students will read papers before each session and perform mini-exercises, such as posting a question about the paper they've read. Each student will be required to lead a discussion of 1-2 papers throughout the course, in pairs or small groups. There will also be a small research project, which will also be completed in small groups.

Attendance is mandatory.

Language of instruction:

The language of instruction and discussion is Hebrew. The course materials are in English.

Grading:

The course grade will be comprised approximately as follows:

- Project 40%
- Leading a discussion 40%
- Mini-exercises 10%
- Attendance & Participation 10%

Schedule:

The course meets weekly on Tuesdays at 10:30-12:30