

CSCI 49362 Language Technology / CSCI 76000 Computational Linguistics Fall 2020

Instructor: Dr. Sarah Ita Levitan
Time: Thursdays 5:35 - 8:15pm
Location: Online, Blackboard Collaborate

Contact

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Office hour: Thursdays, 10-11am on Blackboard Collaborate

Course Description

This course introduces computational linguistics/natural language processing (NLP), the study of computational systems that can understand and generate human language. It covers core problems in NLP and speech processing and presents algorithms for solving these problems. Students will complete a course project where they design and implement a computational approach to a language processing problem. Topics include: language models, parsing, machine translation, semantic analysis, and speech recognition.

Prerequisites

CSCI 23500 and CSCI 26500 and (STAT 11300 or STAT 21300), all with a C or better.

Course Organization

This is a fully online synchronous course. We are using Blackboard for all the learning activities and course documents and BB Collaborate to meet.

Technology Needed

Students will need a laptop or tablet with a camera and microphone and speaker. Students will also need a gmail account. If you do not already have a gmail account, please create one: <https://accounts.google.com/SignUp>

Please be aware that the instructor in this course will require that the camera and audio be on during class sessions.

Please email me if there are any issues with this.

Learning Outcomes

The student will be able to:

- Understand how core NLP algorithms work
- Implement and use core NLP tools
- Analyze text using linguistic features
- Conduct and evaluate research in NLP

Textbook

Speech and Language Processing, Jurafsky & Martin, 3rd edition

**No need to purchase, will provide links to chapters online:

<https://web.stanford.edu/~jurafsky/slp3/>

Readings will also be assigned from research papers throughout the semester.

Grade Breakdown

10% Attendance and participation

10% Quizzes

30% Labs

50% Final project

Graduate students will also be required to read an additional research paper and present it to the class.

Academic Integrity

The faculty and administration of Hunter College support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The complete text of the CUNY Academic Integrity Policy can be found at

<https://www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/academic-integrity-policy/>. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member MUST report the violation.

Non-attendance because of religious beliefs

The New York State Education Law provides that no student shall be expelled or refused admission to an institution of higher education because he or she is unable to attend classes or participate in examinations or study or work requirements on any particular day or days because of religious beliefs. Students who are unable to attend classes on a particular day or days because of religious beliefs will be excused from any

examination or study or work requirements. Faculty must make good-faith efforts to provide students absent from class because of religious beliefs equivalent opportunities to make up for the work missed; no additional fees may be charged for this consideration.

<http://www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/reasonable-accommodations-and-academic-adjustments/vi-religious-accommodations/>

Online Etiquette and Anti-Harassment Policy

The University strictly prohibits the use of University online resources or facilities, including Blackboard, for the purpose of harassment of any individual or for the posting of any material that is scandalous, libelous, offensive or otherwise against the University's policies.