2024/25 Semester B
CS 6493 Natural Language Processing
City University of Hong Kong (Dongguan)

Syllabus

- Reference books: [R1] Speech and Language Processing An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition, 3rd Edition, 2020, by Daniel Jurafsky and James H. Martin.

  `https://web.stanford.edu/~jurafsky/slp3/ed3book.pdf`

  [R2] Natural Language Processing, 2018, by Jacob Eisenstein.

  `https://cseweb.ucsd.edu/~nnakashole/teaching/eisenstein-nov18.pdf`

- Course website: Please check the Canvas website often for announcements, course materials, and homework assignments.

  We use Jupyterhub or Google's Colab for tutorials and course projects.

  `https://colab.research.google.com/`

- For the homework/projects:
  - Start solving your homework early.
  - The homework's due date will be noted on the calendar and homework instructions. No late homework will be accepted. Homework will be turned in online via Canvas.

- For the tutorial: tutorials will be mainly about hands-on abilities.

- Grading: HWs= 60% (2 individual assignments with 15% each, 1 group project with 30%), Final= 40% (2 hours).
  For a student to pass the course, at least 30% of the maximum mark of final must be obtained.

- Instructor: Linqi Song, Associate Professor, CS Department, CityUHK&DG,
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  TAs:

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  Mr. Hanlin Zhang (hanlzhang8-c@my.cityu.edu.hk).

- Lectures: Tuesdays 8:30 - 10:20, AC5-415.

- Tutorials: Tuesdays 10:30 - 11:20, AC1-201.

- Schedule: the schedule may be subject to change according to course progress

Week	Date	Topic	HW
1	Jan. 7	Introduction	
2	Jan. 14	Language model and word embedding (1)	Assign HW1
3	Jan. 21	Word embedding (2)	
4	Feb. 18	Transformer and pretraining-finetuning	
5	Feb. 25	NLP tasks (1): Understanding tasks	Assign HW2, HW1 due
6	Mar. 4	NLP tasks (2): Generation tasks	Assign group project
7	Mar. 11	Large language models	
8	Mar. 18	LLM prompting and alignment	HW2 due
9	Mar. 25	LLM agents	
10	Apr. 1	Efficient training of LLMs	
11	Apr. 8	Advanced topics and recent trends	
12	Apr. 15	Course review	
13	Apr. 22	Project presentation	Group project due