

MODULE REPORT

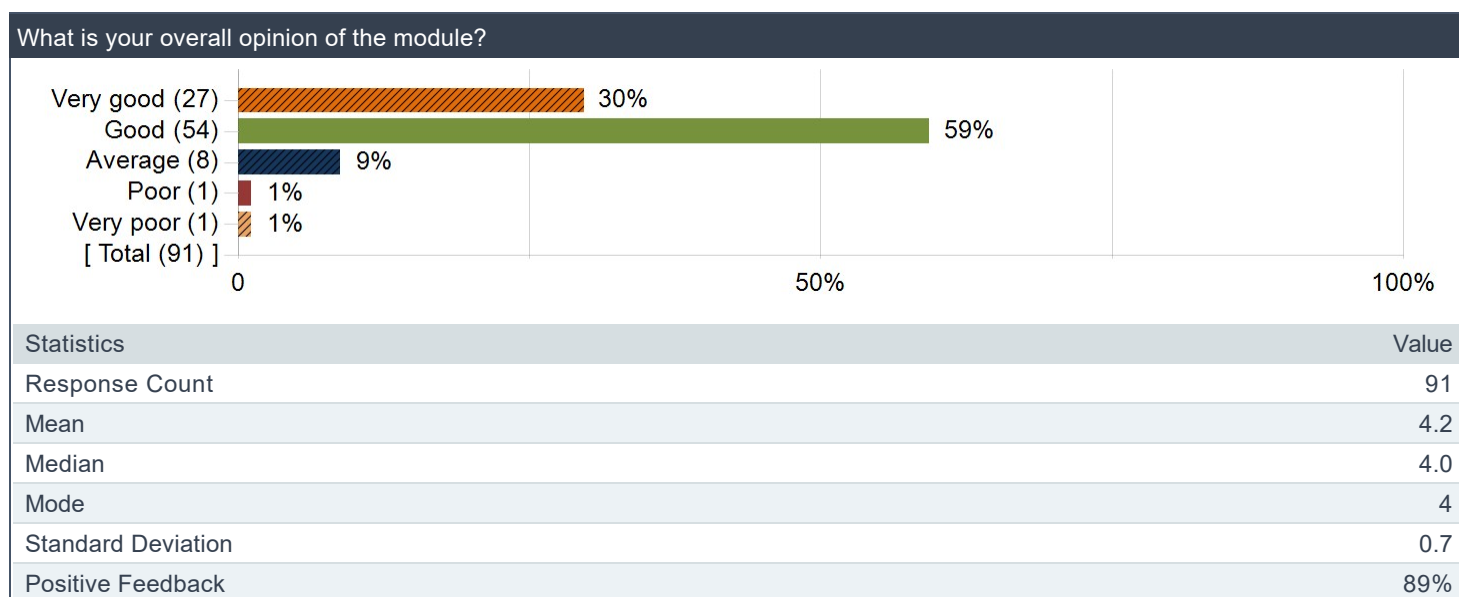
Module	CS4248 - NATURAL LANGUAGE PROCESSING
Academic Year/Sem	2022/2023 - Sem 2
Department	COMPUTER SCIENCE
Faculty	SCHOOL OF COMPUTING

Note: Class Size = Invited; Response Size = Responded; Response Rate = Response Ratio

Raters	Student
Responded	91
Invited	174
Response Ratio	52%

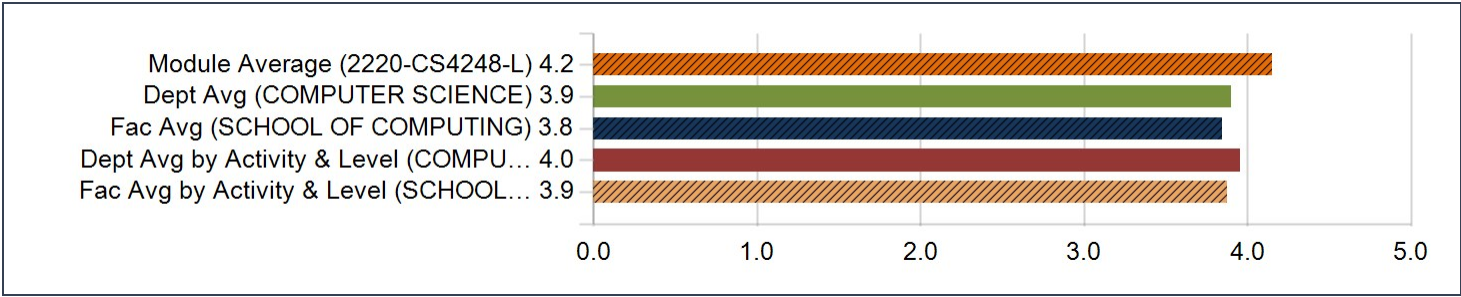
1. Overall opinion of the module

Distribution of Responses



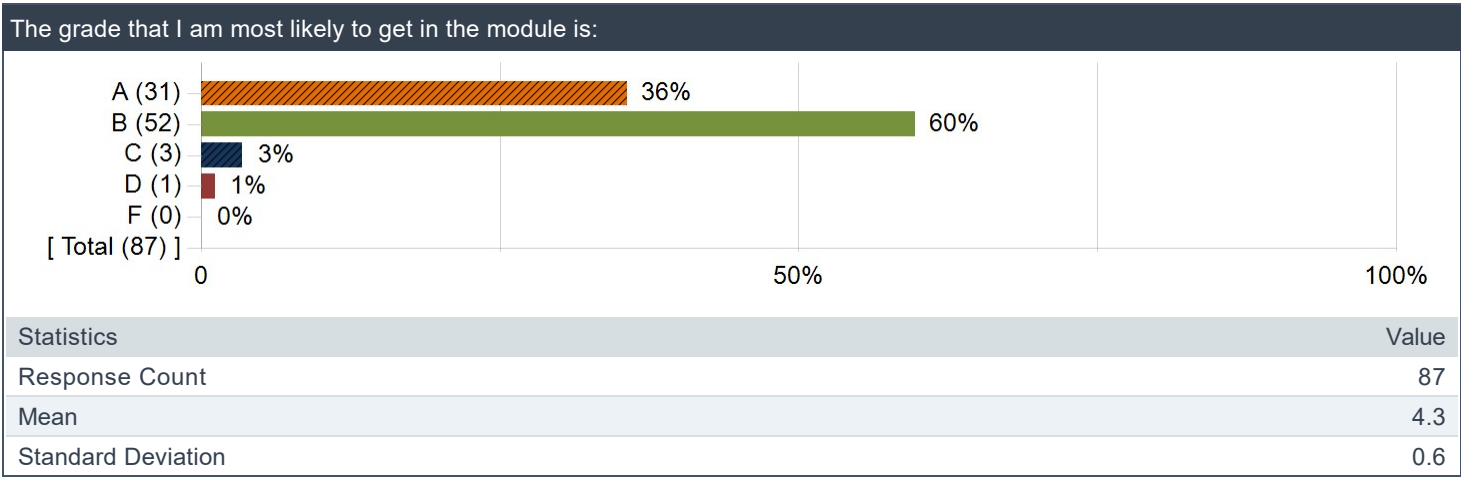
Rating Scores

Question	Module Average (2220-CS4248-L)		Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
What is your overall opinion of the module?	4.2	0.7	3.9	0.9	3.8	0.9	4.0	0.9	3.9	0.9



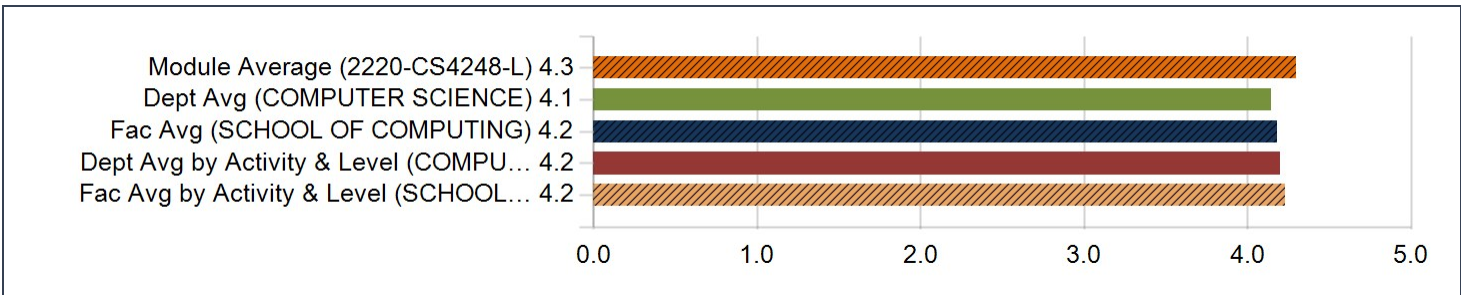
2. Expected Grade

Distribution of Responses



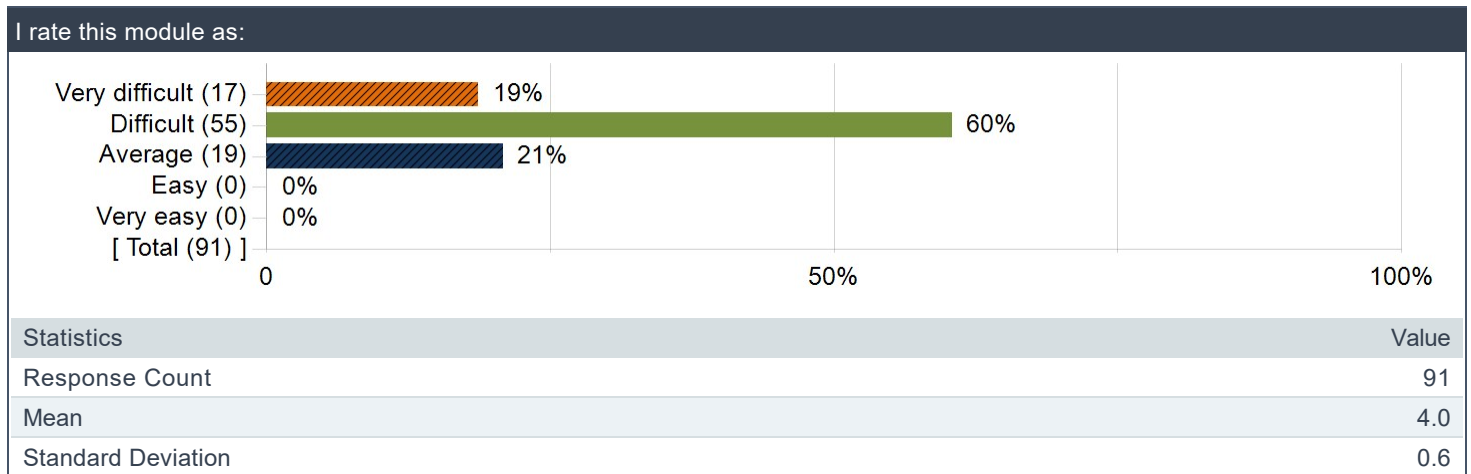
Rating Scores

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	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The grade that I am most likely to get in the module is:	4.3	0.6	4.1	0.8	4.2	0.7	4.2	0.6	4.2	0.6



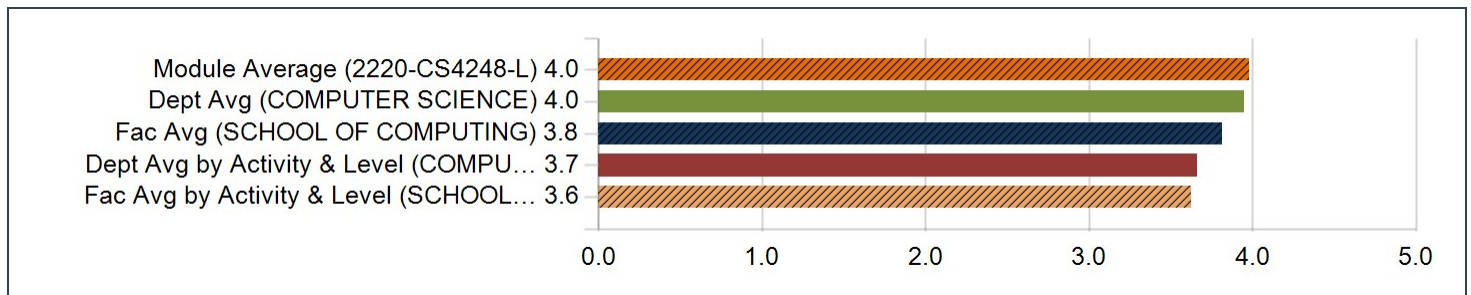
3. Difficulty Level of the module

Distribution of Responses



Rating Scores

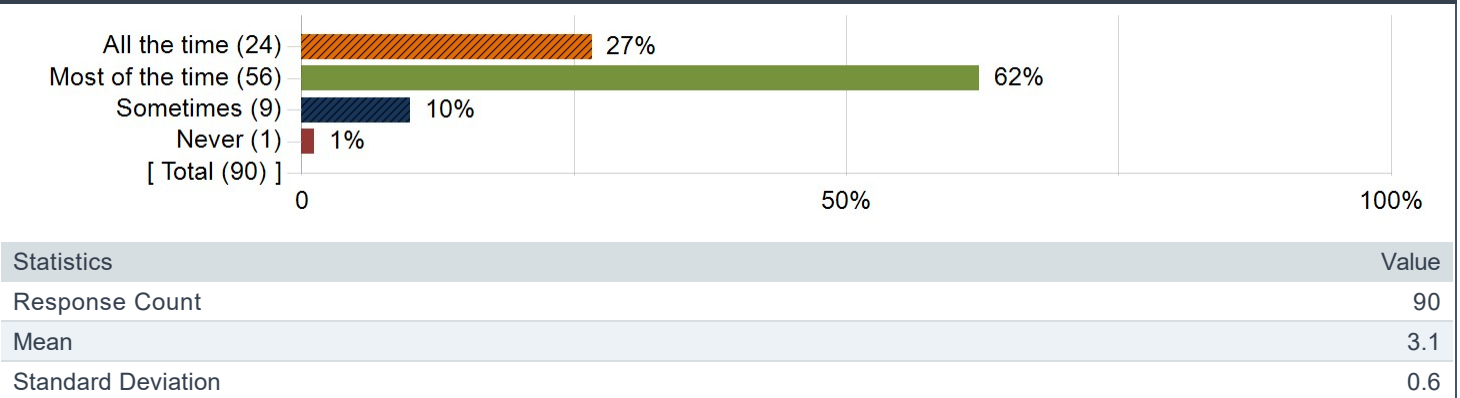
Question	Module Average (2220-CS4248-L)		Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
I rate this module as:	4.0	0.6	4.0	0.8	3.8	0.8	3.7	0.8	3.6	0.8



MODULE LEARNING OUTCOMES

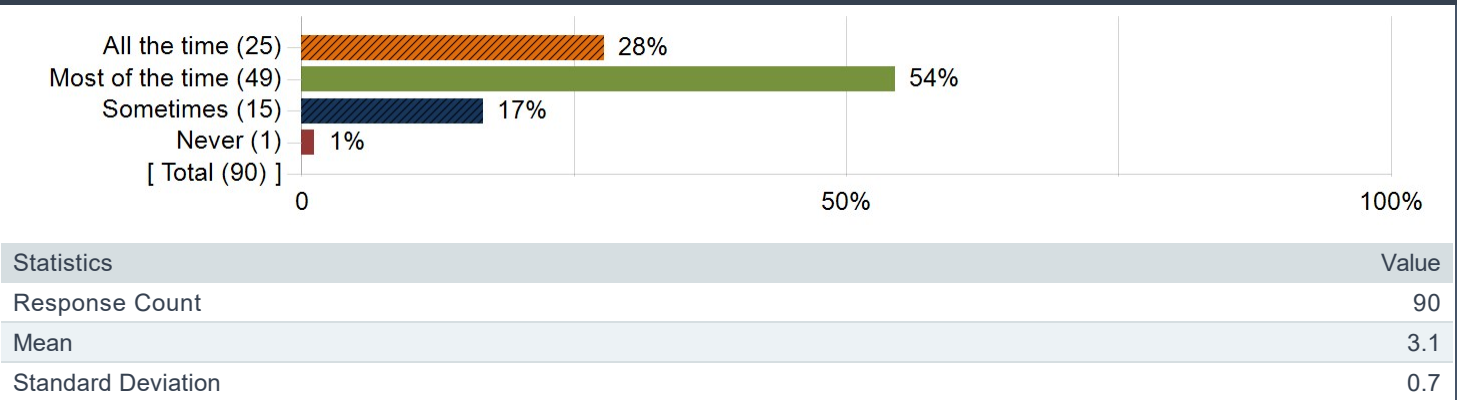
1. Understand the core concepts in natural language processing (NLP), including language models, word embeddings, neural networks, sentence parsing, and semantic representations.

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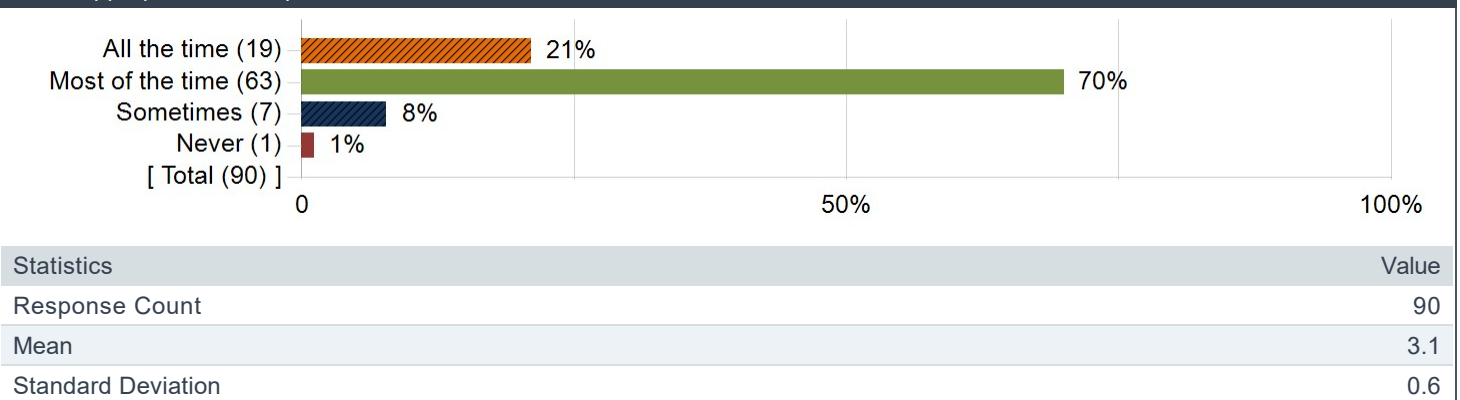
2. Identify sources of ambiguity in NLP.

Identify sources of ambiguity in NLP.



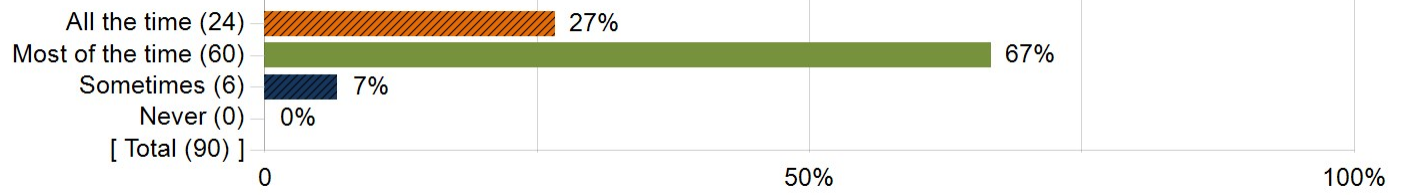
3. Select appropriate techniques to solve an NLP task.

Select appropriate techniques to solve an NLP task.



4. Evaluate and compare the performance of solutions to an NLP task.

Evaluate and compare the performance of solutions to an NLP task.



Statistics	Value
Response Count	90
Mean	3.2
Standard Deviation	0.5

WHAT I LIKE / DISLIKE ABOUT THE MODULE

What I liked about the module:

Comments
The writing assignment make me better understand how the module works
The content is really interesting and I think that the learning will be helpful for my career in future.
Interesting. I will never look at English or any other language the same way again.
It breaks down the core concepts of NLP well, and I liked that it was organized in a sequential manner paralleling the development of NLP as a field over time, which made things easier to understand (essentially, every week's topic would build on top of previous topics).
Exposure to nlp with practical implementations.
The moderately difficult but very effective assignments, unlike other CS-coded modules with way-too-difficult assignments. The lecturers and TAs are super helpful and passionate!
Interesting topics
Good exposure to many NLP and ML topics.
Very relevant to today's technologies especially chatgpt.
the deep learning models
The lectures.
The content was very interesting and modern, with content that is actually relevant to modern-day concepts in Natural Language Processing. This is the only module that I have taken that actually keeps up with modern papers and concepts in NLP.
NLP is very popular and this module give me basic understanding of what NLP is doing and how to do a NLP task.
it provides some basic knowledge of NLP which is very useful
The assignment is challenging
Breadth of the module feels sufficient.
Content is quite interesting
Probably one of the coolest mods I've taken. I think it covers all the essential NLP knowledge we need to know. As a 4mc mod it managed to cover both traditional and deep-learning NLP, which appropriate depth and width, this is great. I also think the assignments are quite challenging and fun to do.
It is quite interesting
The lectures covers knowledge about NLP in a comprehensive and detailed way. The tutorial and project taught me how to apply what I learned in the lectures to the real application. I learned a lot. Professors and TA are responsible.
Sufficient breadth on the subject matter. Course logistics and the Canvas page are well-organized. Happy to see that transformers and LLMs are added to the last lecture, even though it was not originally planned. The TEAMMATES feedback for the project is useful in discouraging free-riders. Assignment workload is suitable.
It has interesting concepts which are relevant in today's digital age.
the assignments
content, assignments 1 and 2
Two teachers are very passionate about the field and teaching + the most responsible TA I have ever met, Yisong —> The best course experience I have ever had.
Give students hands-on experience on natural language processing and make profound theories easier to understand
I got to learn a lot about NLP about the many areas.
Content was well covered and engaging
Project-based and assignments to act as checkpoints within the module.

What I did not like about the module:

Comments

Comments
Not actually dislike but it is better for students with basic machine knowledge to select it
There is too much content every single lecture. I do not think it is effective to squeeze so much learning in one semester (or maybe streamline/simplify the learning objectives).
Some parts were math heavy but understandable since the topic usually involves complex math.
I believe that 9am – 12pm time slot is the main issue. Not only was this not ideal (3 hours on a morning is generally not ideal), this combined with the commute times from home and other personal tasks meant that I unfortunately missed quite a few of the lectures.
I find it a little hard to communicate with non undergraduates due to the vast difference in level of expertise.
The understanding of english language required, such as part of speech tags
Pace is too fast at times
The project component might be a bit messy due to unclear expectations. Some of us are new to NLP and NLP research in general so we did not know what to expect/clarify with the TAs.
Assignments can be a lot of work for only 10% of the final grade, and there are 3 of them. Last assignment was very math heavy
Assignment 1 was too vague and tedious. Projects + assignments + tutorials + pre lecture activities makes a heavy workload for any student. My suggestion is to remove either the group project or assignments.
Does not teach how to implement and put into practice despite understanding the lecture content.
Workload is a lot higher than expected.
Random pairings with another subteam. The other subteam didn't do any work after intermediate update (not exaggerating). They are haozhe and ziyu :)
Assignments and time consumed is not proportional.
No
Assignments are sometimes badly design with non–useful feedback. Feedback is somewhat slow.
Assignments are a little bit tough.
The students taking the module. They should split the class into Masters/SkillsFuture and NUS Undergraduates into 2 different groups. Master's students and Undergrads have very different working styles. Moreover, they rarely contribute in class and do not communicate very well in English. Even though the professors are great, the students make up a lot of how the class is.
At the very least, they should make group projects teams of undergraduate students only and masters students only, without subjecting the undergrads to the miserably poor work ethic and communication skills of some Masters students.
Also, the TA Yisong was avoidant and barely available by email. The man is always busy, even to reply to emails and never has the time to discuss HIS dataset.
The course covers too much and I hope to increase more code practice associated with popular python libraries.
The workload is a bit high
Content can be more difficult and with more depth
The assignment is so difficult that I used almost 3–4days for each assignment...
No
content does not feel structured and the lecture slides are not very comprehensive. Should take a look at stanford NLP course slide decks and the kind of content they put out. Prof can also improve on communication, because his lectures tend to be very boring esp for an evening class where everyone is tired.
The workload was extremely high and difficult. The lecture material is also very difficult, there could be more practice questions provided.
The assignments are somewhat too hard for novice
Please move back to slack for lecture activity discussion :D
Large workload and the assignments are difficult. Also, I think, there is no need to assign 6 people to do a project, 4 is enough. I don't like the 'random' assignments of teammates :(
Disappointed to find many typos and miscommunications for the assignments, despite the relatively large number of teaching staff and history for this course.
The group size for the project could be smaller for this project scale. It is very difficult to schedule regular meetings with the course tutor where all members are available.
Group project is a disappointing experience. Some students in my group struggled with report writing and not willing to contribute,

Comments

which I find disappointing for the course offered at this level.

I hope the course can be split into a dedicated course for (graduate) students that have stronger foundations in machine learning, deep learning and scientific writing, instead of offering to a mixture of both graduates and undergrads.

The project

I'd prefer this module has ML as prerequisite. I did not take ML before, and I had to put more effort to keep up with this module. Though the ML part was covered briefly in one lecture, I don't think it's enough for me to get sufficient fundamental to applying what I learned, especially I struggled on Assignment 2 and Team Project since I need to be able to design my own model with neural network

the group project

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assignment 3 too easy compared to 1 and 2. group of 6 too big for a group project, some people do not work at all. ta assigned to project but not helpful at all.

Please do not 'match' students by the teaching staffs, students are more likely to form good groups by themselves.