TEACHER REPORT

Name of Teacher	Leong Wing Lup, Ben
Module	CS2109S-Introduction to AI and Machine Learning (LECTURE)
Academic Year/Sem	2022/2023 - SEM 2
Department	COMPUTER SCIENCE
Faculty	SCHOOL OF COMPUTING

Raters	Student
Responded	217
Invited	269
Response Ratio	81%

Note:

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

A. GUIDELINES FOR INTERPRETING THE REPORT

The teacher evaluation report is for developmental purposes and is meant to help identify strengths and areas for improvement. Please consider the following recommendations that will aid in interpreting the results:

1. Examine the report by taking note of patterns in order to consider how best to act on the feedback your students have taken the time to provide. Use the reflection section at the end to reflect upon how you might act on the feedback.

2. These evaluations stem from student perception and thus constitute one source of evidence among others as to the quality of your teaching. Any response to the feedback should be based on the most representative results rather than on outlying responses.

3. Upon getting a general sense as to what has gone well, and which areas may require attention and improvement, it is important to drill down to the related questions. These questions can help guide future action if feedback from students suggest areas for improvement.

4. Keep both the likert scale and written comments in mind while reading through the report. High scores (4+) suggest student consensus indicating a strength. On the other hand, low scores (2-) should be considered as an area that requires immediate developmental focus based on student feedback.

B. NOMINATION FOR TEACHING AWARDS

	Response Count
I would like to nominate Leong Wing Lup, Ben for teaching awards	12

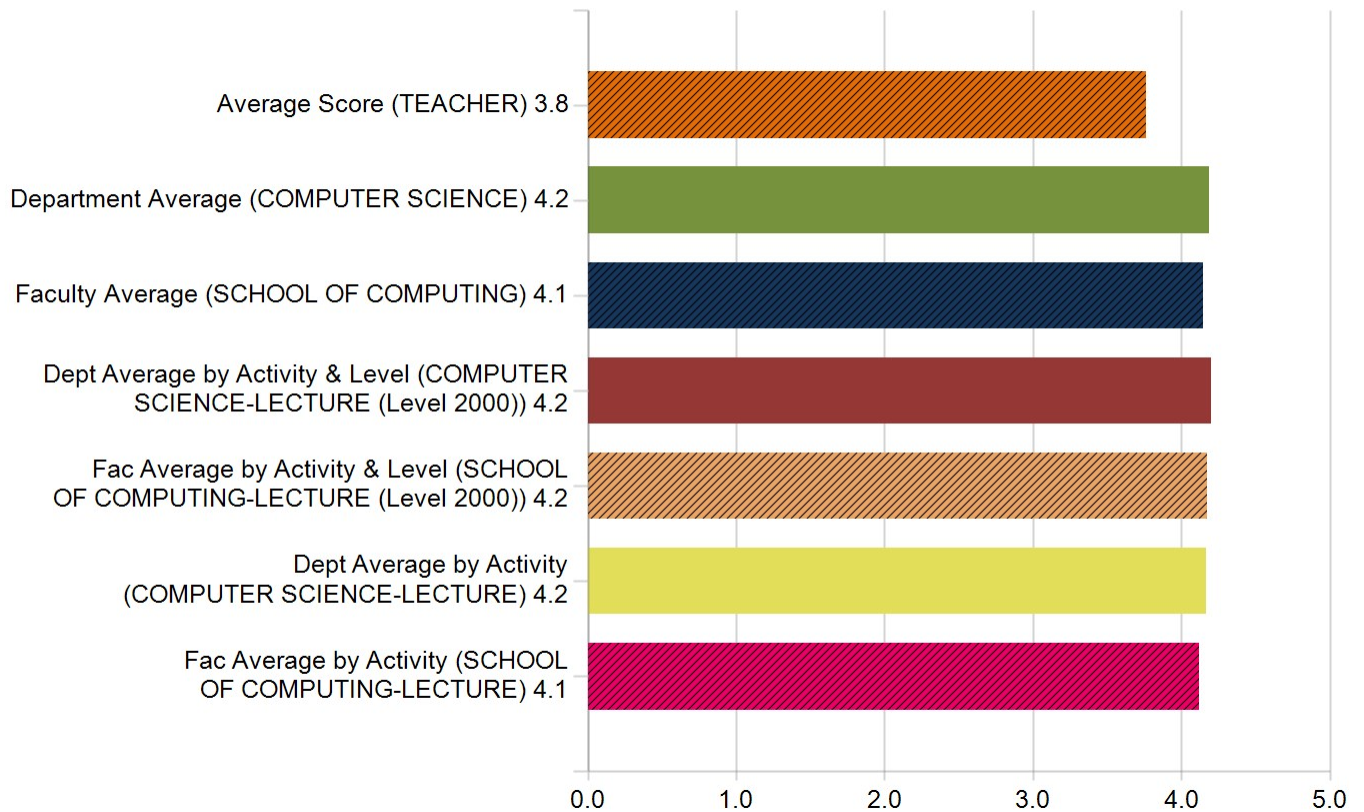| Comment |
|---|
| - He does his best for his students and it really shows. |
| - This AI module taught under him is very valuable and I have gained a lot of useful skills and knowledge. |
| - The teacher engaged me in useful interactions that have enhanced my learning. |
| - Cares about student's questions and concerns, and throughout the module, has been keeping us updated on the status of the marking, examinations etc. which is something that goes underappreciated most of the times. |
| - He conducts engaging lectures |
| - I looked forward to his lectures because I always learn something new. He has very high energy and explains concepts well. Also, he provides timely feedback to students by responding to queries on the forum, even though it is beyond his working hours. He is constantly seeking ways to improve the module quality. |
| - Nice |
| - Overall teaches the module really well. |
| - -- |
| - good! |
| - Engaging |
| - Pretty good at what he does and aims to teach, solid knowledge of course material and tries his best to present it in a digestible format! |
| - Prof Ben is an excellent and highly responsive professor that focuses on building student fundamentals, a passion for the field and making complex concepts easy to understand. |

C. STUDENT FEEDBACK SCORES

(i) Rating Score

Question	Average Score (TEACHER)		Department Average (COMPUTER SCIENCE)		Faculty Average (SCHOOL OF COMPUTING)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Overall, the teacher is effective.	3.8	0.9	4.2	0.8	4.1	0.8

Question	Average Score (TEACHER)	Dept Average by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))	Fac Average by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	Dept Average by Activity (COMPUTER SCIENCE-LECTURE)	Fac Average by Activity (SCHOOL OF COMPUTING-LECTURE)
	Mean	Mean	Mean	Mean	Mean
Overall, the teacher is effective.	3.8	4.2	4.2	4.2	4.1

Overall, the teacher is effective

Category	Score
Average Score (TEACHER)	3.8
Department Average (COMPUTER SCIENCE)	4.2
Faculty Average (SCHOOL OF COMPUTING)	4.1
Dept Average by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))	4.2
Fac Average by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	4.2
Dept Average by Activity (COMPUTER SCIENCE-LECTURE)	4.2
Fac Average by Activity (SCHOOL OF COMPUTING-LECTURE)	4.1

Question	Average Score (TEACHER)		Department Average (COMPUTER SCIENCE)		Faculty Average (SCHOOL OF COMPUTING)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The teacher has enhanced my thinking ability.	3.8	0.9	4.2	0.8	4.2	0.8
The teacher provided timely and useful feedback.	3.8	0.9	4.2	0.8	4.1	0.8
The teacher has increased my interest in the subject.	3.7	1.0	4.2	0.8	4.1	0.9
Average of Q1-Q3	3.8	0.9	4.2	-	4.1	-

Question	Average Score (TEACHER)	Dept Average by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))	Fac Average by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	Dept Average by Activity (COMPUTER SCIENCE-LECTURE)	Fac Average by Activity (SCHOOL OF COMPUTING-LECTURE)
	Mean	Mean	Mean	Mean	Mean
The teacher has enhanced my thinking ability.	3.8	4.2	4.2	4.2	4.2
The teacher provided timely and useful feedback.	3.8	4.2	4.1	4.1	4.1
The teacher has increased my interest in the subject.	3.7	4.2	4.2	4.1	4.1
Average of Q1-Q3	3.8	4.2	4.2	4.2	4.1

Department Specific Questions

Question	Average Score (TEACHER)		Department Average (COMPUTER SCIENCE)	
	Mean	Standard Deviation	Mean	Standard Deviation
The teacher engaged me in useful interactions that have enhanced my learning.	3.8	0.9	4.2	0.8

Question	Average Score (TEACHER)		Department Average (COMPUTER SCIENCE)	
	Mean	Standard Deviation	Mean	Standard Deviation
The teacher's attitude and approach encouraged me to think and work in a creative and independent way.	3.7	1.0	4.2	0.8

Question	Average Score (TEACHER)		Department Average (COMPUTER SCIENCE)	
	Mean	Standard Deviation	Mean	Standard Deviation
The teacher cares about student development and learning.	3.8	1.0	4.2	0.8

(ii) Distribution of Responses and Additional Statistics

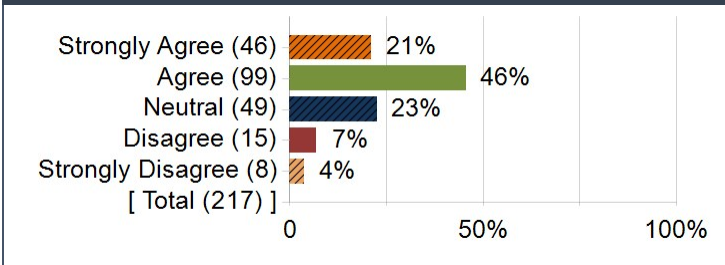### 1. The teacher has enhanced my thinking ability.
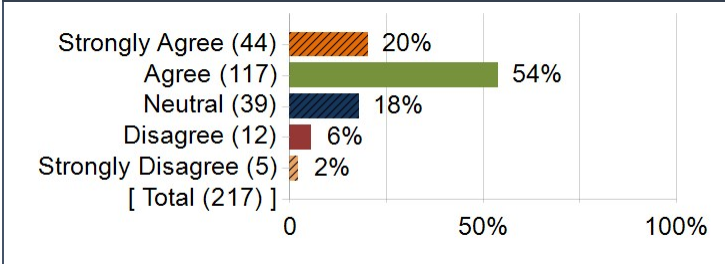
Strongly Agree (44) 20%
Agree (117) 54%
Neutral (39) 18%
Disagree (12) 6%
Strongly Disagree (5) 2%
[Total (217)]

Statistics	Value
Response Count	217
Mean	3.8
Median	4.0
Mode	4
80th Percentile	4.8
Standard Deviation	0.9
Positive Feedback	74%

2. The teacher provided timely and useful feedback.

Strongly Agree (44) 20%
Agree (106) 49%
Neutral (48) 22%
Disagree (11) 5%
Strongly Disagree (6) 3%
[Total (215)]
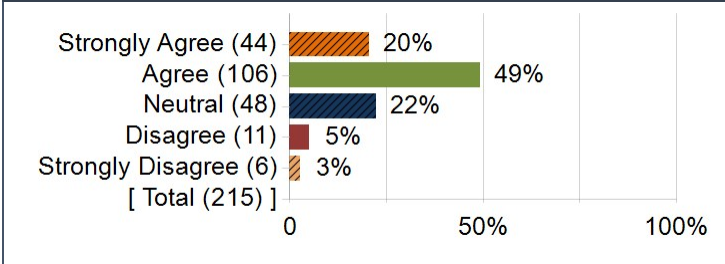
Statistics	Value
Response Count	215
Mean	3.8
Median	4.0
Mode	4
80th Percentile	5.0
Standard Deviation	0.9
Positive Feedback	70%

3. The teacher has increased my interest in the subject.

Strongly Agree (46) 21%
Agree (99) 46%
Neutral (49) 23%
Disagree (15) 7%
Strongly Disagree (8) 4%
[Total (217)]

Statistics	Value
Response Count	217
Mean	3.7
Median	4.0
Mode	4
80th Percentile	5.0
Standard Deviation	1.0
Positive Feedback	67%

4. Overall, the teacher is effective.
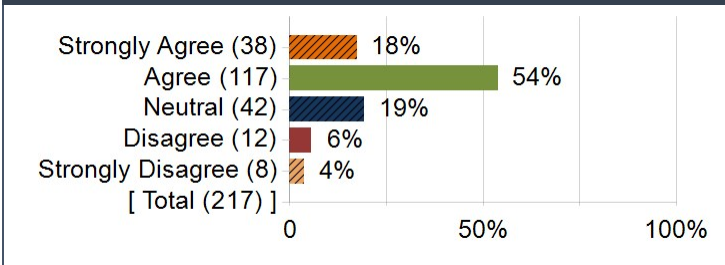
Strongly Agree (38) 18%
Agree (117) 54%
Neutral (42) 19%
Disagree (12) 6%
Strongly Disagree (8) 4%
[Total (217)]

Statistics	Value
Response Count	217
Mean	3.8
Median	4.0
Mode	4
80th Percentile	4.0
Standard Deviation	0.9
Positive Feedback	71%

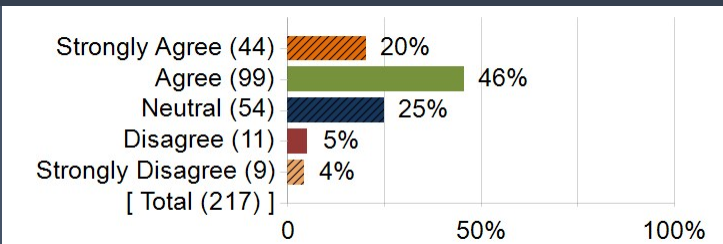**The teacher engaged me in useful interactions that have enhanced my learning.**

The teacher engaged me in useful interactions that have enhanced my learning.

Strongly Agree (41) — 19%
Agree (111) — 51%
Neutral (41) — 19%
Disagree (17) — 8%
Strongly Disagree (6) — 3%
[Total (216)]
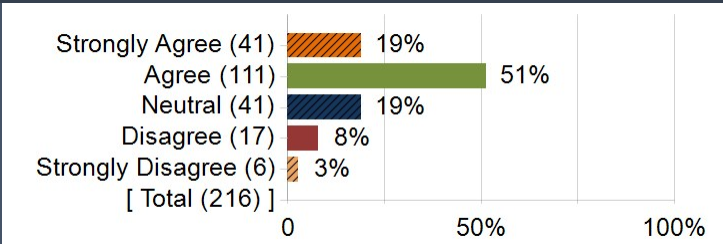
| Statistics	Value
Response Count	216
Mean	3.8
Median	4.0
Mode	4
80th Percentile	4.0
Standard Deviation	0.9
Positive Feedback	70%

The teacher's attitude and approach encouraged me to think and work in a creative and independent way.

The teacher's attitude and approach encouraged me to think and work in a creative and independent way.
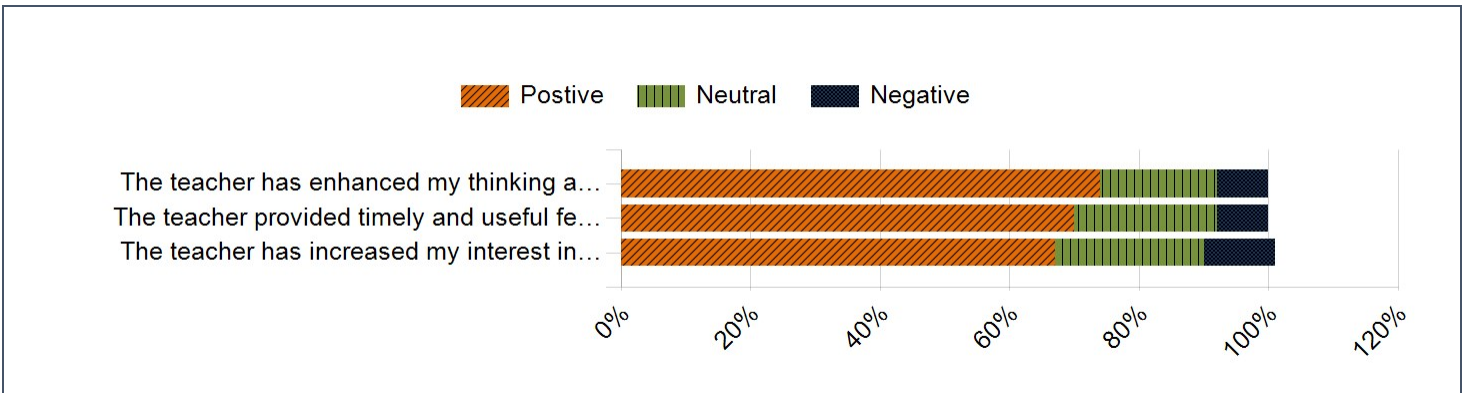
Strongly Agree (44) — 20%
Agree (99) — 46%
Neutral (54) — 25%
Disagree (11) — 5%
Strongly Disagree (9) — 4%
[Total (217)]

Statistics	Value
Response Count	217
Mean	3.7
Median	4.0
Mode	4
80th Percentile	4.8
Standard Deviation	1.0
Positive Feedback	66%

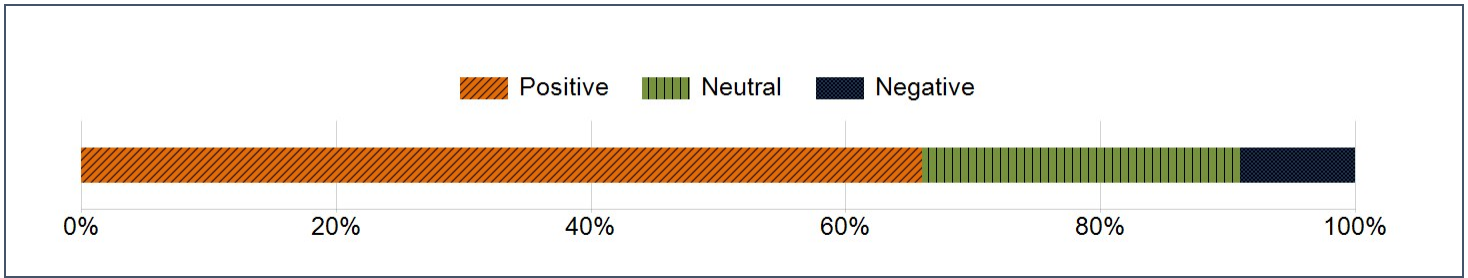**The teacher cares about student development and learning.**

The teacher cares about student development and learning.	

Strongly Agree (47) — 22%
Agree (101) — 47%
Neutral (51) — 24%
Disagree (9) — 4%
Strongly Disagree (9) — 4%
[Total (217)]

Statistics	Value
Response Count	217
Mean	3.8
Median	4.0
Mode	4
80th Percentile	5.0
Standard Deviation	1.0
Positive Feedback	68%
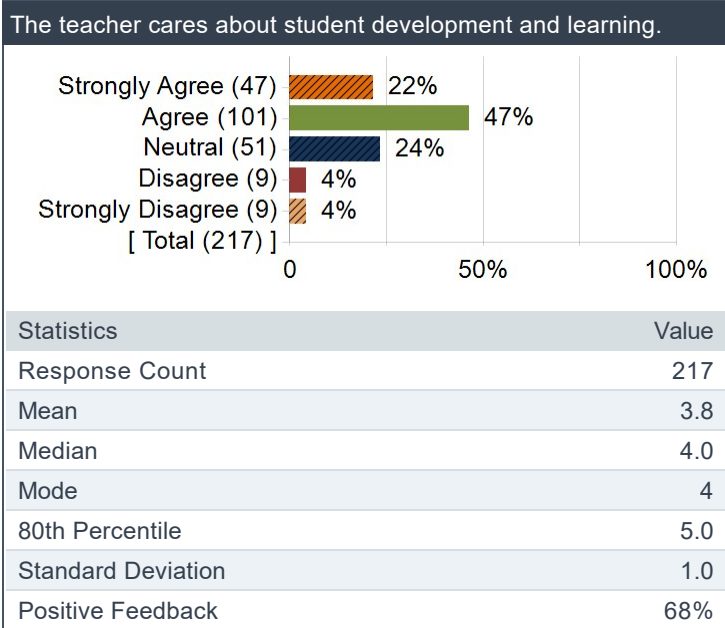
(iii) Scale Distribution of Responses

Legend: Postive | Neutral | Negative

The teacher has enhanced my thinking a…
The teacher provided timely and useful fe…
The teacher has increased my interest in…

The teacher engaged me in useful interactions that have enhanced my learning.

Legend: Positive | Neutral | Negative
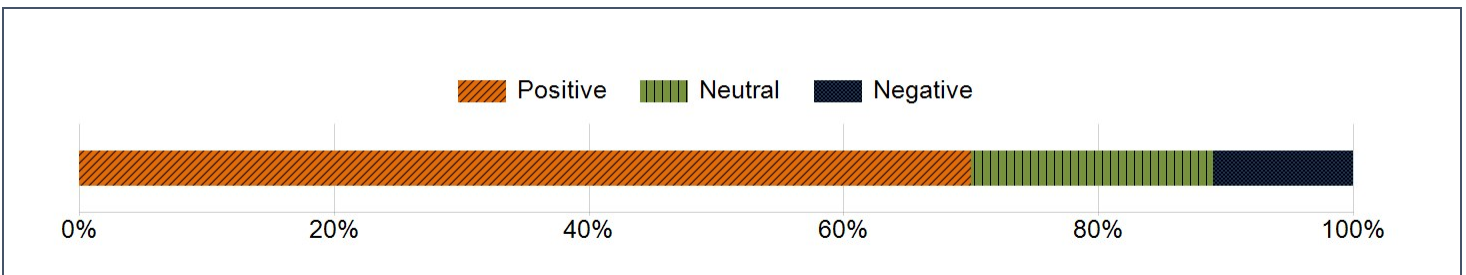
The teacher's attitude and approach encouraged me to think and work in a creative and independent way.

The teacher cares about student development and learning.

(iv) Rating Scores vs. Gender

Question	M	F	Overall
The teacher has enhanced my thinking ability.	3.8	3.9	3.8
The teacher provided timely and useful feedback.	3.8	3.8	3.8
The teacher has increased my interest in the subject.	3.7	3.8	3.7

D. STRENGTHS

What are Leong Wing Lup, Ben's strengths?

Comments
He is able to describe difficult processes in a simple manner.
relatability
Able to give high level overview
Very knowledgeable and good at explaining things intuitively.
–
smart maybe
Teach effectively
–
nil
Strengths are listen to students, helpful and very knowledgeable
Witty, responds fast, puts in effort and can tell that he is trying his best to make sure everyone understands the concept
He thinks very quickly
Gives main idea really well, but explains in a way that "enhances thinking" but doesn't really teach us how to think.
He is good at the stuff that he is teaching.
He is able to explain difficult concepts easily.
Charismatic professor who can communicate well
Very intuitive teaching with a lot of focus on creative thinking approach.

Comments
nil
– good abstraction of math – kinda fun
NA
talking
None
I really appreciate the effort Prof Ben put into communicating with us be it through the forum, or during the lectures to really make sure that we are able to follow his pace and am understanding the materials properly. Although this is a difficult module, it is nice that Prof Ben tries his best to consistently hear from us and try to improve on the module without neglecting our learning which I really appreciate.
He is clear in presenting the learning outcomes.
He genuinely tries to provide what he believe to be good teaching material.
His lectures are really engaging. AI and machine learning concepts are pretty diffcult, but he tries his best to make it easy for us to understand. I found his lectures to be really clear, and it motivated to learn more about the subject.
Good at simplifying concepts and trying to put students at ease when facing hard topics. Transparent about module related matters, encourages students to focus on learning over grades
That his lectures are basically a conversation, rather than a lecture. That he is frank.
He listens to student feedbacks for the course.
Lecture is very engaging
He is able to engage the students in an effective way.
Genuinely trying to do what's best for students' learning
Knowledge and relatability.
made the lectures more interesting even when the content became extremely dense and complicated.
Takes into consideration student's feedback
Tries to make things interesting and instills some realistic scenarios in his lecture slides.
seems to genuinely care about the subject.
Engaging teaching style, well explained concepts.
He is enthusiastic and responsive.
I think he really does want to ensure students take away the concepts rather than just solve the problem sets, which is why he places an emphasis on understanding.
Very clear in his teaching and sieve out important information that we need to take note in lecture.
lectures are clear and module is well thought out
–
simplifies complex concepts rather well
He is able to explain concepts well on a high level and I learnt quite a lot from lectures regarding both AI and ML despite the atrocious grade that I will be getting.
I would like to comment on Prof Ben's exam paper. Exam paper was well managed, since I think that the midterm is comprehensive and assesses the key takeaways of the module quite well. Definitely deserves an appreciation for the effort in standardising a good paper throughout the past years, while keeping it challenging in an appropriate manner.
nil
Prof Ben is a very engaging prof who is able to convey complex concepts clearly. I feel like his lectures are of significant quality, and I am able to pick up a lot of information and learn a lot from them.
Prof Ben is engaging in his lectures through his exciting personality
Explanation quite clear
Seems like he is putting a lot of effort into making the class more manageable for us
He has tried his best to adjust the mod's assessment so that everyone has a chance to do it and get a good score.
Good at explaining concepts.
listens to feedback and adjusts himself

Comments
Answers questions and clarifications well on Coursemology
nil
Kind of engaging. My favorite parts are those recaps that shows understanding that I remember almost nothing from the math modules.
Really passionate in his teaching, always tries to benefit the student's learning.
accomodating to slow students like me by slowing down his lecture, and revising concepts from 2040s which I have already forgotten. Even though the media has portrayed him negatively, I actually think his teaching is really good, and the coordination of the module.
Focuses on application. Focuses on framing problems which are important for AI and ML.
Receptive to feedback
Prof Ben is an enthusiastic lecturer!
Inserting videos during the lecture to keep us entertained
Teaches in a very interactive manner and is able to explain concepts well
pretty intuitive language and teaching that allows students to grasp the concepts quite easily
Emphasizes on critical thinking and perspectives beyond grades
The lecture's content is very good.
Makes attempts to make his lecture interesting to listen to. Energetic voice.

E. AREAS FOR IMPROVEMENT

What improvements would you suggest to Leong Wing Lup, Ben?

Comments
nil
_
I suggest spending more time explaining how things work rather than talking about chat GPT or other unrelated stuff. Also, do not try to throw a lot of math at the beginning and told the students that they don't need to worry about that at the end.
Sometimes explanations are abit convoluted
Please slow down when explaining detailed topics. Go through the detailed topics in an orderly way to prevent confusion or people getting lost.
_
Care more about students. Make clearer slides. TEACH CLEARLY. Go through everything, not SKIP everything. Make use of lecture time not to rant, but to teach.
Non
Everything is too simple to him for him to even bother explaining to us.
nil
Several lectures are hard to follow. It would be easier if the motivation behind each concept was explained before the technical details were taught (e.g. why do I want x1 y1 to become x1 f1 when I don't know why I would want to apply a kernel, or even what f1 means). Prof often stated that he "did not think that further clarification" was necessary. The concept is clear in his mind, however for stupid students such as myself they are not, and his answers to questions we pose serve to confuse us further, requiring further "unnecessary" clarifications.
NIL
Be more clear in teaching
Harsh at times
Can slow down abit more. Or maybe give some concrete examples. I think second half of the semester was slightly better than the first
Don't assume only good students are there, give timely feedback to students who are failiing
I think that it is either that Prof. Ben is not good at explaining the concepts, or that the concepts are too hard. I don't find myself understanding much after listening to lectures. I tried other online sources, and I think that they do provide a much better intuition to the subject.

Comments
–
N.A.
nil
– assume less of the students – be more clear in questions requirement and assumptions
NA
Maybe hand over the teaching to someone who's more experienced in AI and ML. Its already difficult enough to grasp, but its tremendously more so to teach it, and I think a better understanding of the content would be good Better, clearer slides. Its extremely confusing and barebones at times. More focus on intuition.
None
Although I understand that the module has been tuned to fit that of CS2040s, however, I personally feel that the workload of this module has been quite intense, and I often find myself lacking time to fully understand a concept but needing to dive straight into trying to complete the problem sets.
Prof Ben definitely lacks the empathy and judgement of a student's ability to process information. This is not because the topic is hard nor because they don't have the proper understanding of previous topics like he always mentioned; rather, he talks in non–concise, non–cohesive, rambles of strong Singaporean accent (most people don't mind the accent; it's the combination of the accent and the structure of his sentences that's hard to understand) which I believe most people finds hard to understand. He often 'lazes' away at topics that require careful wording and explanations (usually second part of the lectures) and cowers behind "this is just how they did it", "if too much math then yall cannot alr", or other similar phrases whilst ignoring his capability to actually explain surface–level, student–level, intuition of the concepts. I dare to say this because even in his lectures where he showed a 3B1B video, the video manages to properly explain things which Prof Ben regards as "too much math" in a very short time which proves that the concepts are indeed explainable to a certain extent. This attitude affects his lectures on a large scale: things that are not obvious are often 'obvious' to him without further elaboration, the phrase "essentially" or "basically" is used a lot and it shows either his inability to understand what is 'basic' and what is not or his inability to actually explain things that should be explainable provided that some very carefully crafted sentences were planned beforehand. I appreciate his honesty and will to actually do what he believe is 'good', but this fatal flaw of his essentially wasted a huge potential of what I think could genuinely be fixed. He disregards complaints from weaker students who are still willing to voice their complaints (most of them don't even bother to), saying that they're a minority and how mostly it's their fault for not doing this and that (which, to be fair is correct to a certain point since these students aren't very good in understanding what they don't understand anyway). They are the majority and this is really easy to test: during tutorial, make a random sudden quizzes to test the students' understanding and I guarantee you that most of them won't be able to know the answer. All of this because he believes he's in the right most of the time and that the weaker students don't have enough capacity to voice a valid complaint. Furthermore, he surrounds himself with the elites who are, unfortunately, not able to notice anything wrong from his teaching as they intuitively understand what he's trying to say anyway and attribute their understanding to "Prof Ben is explaining it clearly". This is proven once Prof Ben talks about a topic that even the strongest students, my friends, don't understand like PCA; to which said strong students simply believe that it was their fault for not understanding. I have a friend who got A+ in all CS1231S, MA1521, CS2040S, and MA2001, that still struggles on the past few lectures. His use of the phrase "weak students" is quite irritating as my experience of teaching students who'd previously got an F thus had to retake a module and then gets in top 3 position in the tests under my teaching has told me that perhaps it's not always the student's fault for being weak. Maybe their fate at being stupid has not been sealed yet and neither does the topics' fate at being "hard". I really like Ben Leong's passion but I pity his lack of knack at empathizing with actual people that he should be caring about which in turns hinders away his teaching and ability to develop as a teacher. Other appreciation goes to his work, Coursemology, and the very well designed problem sets. I appreciate his works so much and I believe he can keep getting better at teaching as long as he doesn't cower behind "I've taught people for so long" and his belief that his teaching is perfect already. He needs to step away from his toxic elitist environment lol. He genuinely seems to want to improve and that's why I think it is appropriate for me to write this long feedback. I hope you read this Prof Ben :)).
Not applicable.
His bluntness and simplifying can be misinterpreted by some students as being condescending, eg when he says "You all know this already". Personally I view it in a positive way but others might view it differently depending on their circumstances and personality. Just something to take note of in the future!
Too much time spent on admin at start of lecture which causes end of lecture to be rushed.

Comments
Would be better if he does not simply trivialise every concept and treat everything as 'easy' especially when students are completely new to a mod like AI. I also believe time should be more efficiently spend on explanations during lecture.
Maybe this worked for you in the past but, I don't really think that homework should be the front where people learn the bulk of the stuff needed to pass the module. Seeing that I do not really know how to actually start doing the mock exam. I think there are some students who are not capable of doing a conversation style lecture. I do not know what the person commented about bad slides mentioned, but if I would like to say it from my point of view, it would be that, I would prefer to have slides that doesn't need me to review the entire 2 hour lecture recording to figure out an information that I missed.
N/A
Remarks can be a bit blunt sometimes
Could speak a little slower as well as go more in–depth in the lecture content.
Could be less blunt and more cordial when giving feedback to students
More proper explanations on intricate concepts.
some explanations were vague and sometimes too fast.
Slow down on parts that involves math as some students might not have such a good foundation / lost touch with their math
–
Slower pace of talking, as it's a bit difficult to understand sometimes as an international student
can be less harsh when giving feedback.
Slow down teaching speed, provide a legend to commonly used notation/symbols (even if they are reused)
Handwaves math a bit too often with no real direction of where to go if we want to read more, e.g which part of the text book, or what website.
I believe the slides could be done better in a way that reading the slides alone could also provide some form of understanding and they can be used as notes. I understand that we should watch the lectures, but sometimes even after that, I would like to refer to the slides for recap. I also believe that sometimes he brushes past some concepts which may not seem important but hinders understanding in my opinion.
NIL
nil
–
Please speak more clearly. Please refine your lecture slides. They are not effective for learning. Please define each and every symbol in your lecture slides before using them.
more concise and well explained slides,
Speak slower (in the AI parts)
Use less singlish if possible.
Can spend more time in lecture explaining concepts, sometimes a bit fast
He should be more welcoming, the tone he gives off might deter students who are not as strong to ask questions as he assumes alot of the content should be understood easily. But obviously some of us have a harder time grasping concepts and we are all learning.
Prof Ben might need to work on focusing more on the lecture content and not more of a "rant". Almost half of the lecture is spent on discussing current issues on the module, which I think might not be necessary to be brought up on every single class. Prof Ben might also need to work on better accepting negative feedbacks.
nil
He could try to slow down more to care for his slower students sometimes
the second half of the lectures are usually more rushed, which makes it harder to understand. Would be nice if the pacing was better
The prof could have gave more consideration towards "weaker" student ability to follow the materials and it would be nice if he could give more context on what's going on in the lecture
Slides are extremely barebones, add more content.
I think it would be good not to assume that students know something. All of us come from different backgrounds, and while I am not a big advocate of spoonfeeding, I think it would be good to give a small example about how different algorithms operate instead of

Comments
only focusing on the theory and telling us to apply it ourselves. I personally think that examples are efficient to use in teaching, so please utilize that more.
Talks too fast. I dont think he should be bothered about dumbing down or minimising the Math part of the module. ML's math is very essential to truly understand ML algorithms.
nil
Tends to handwave many things and say the thing on the slides are obvious when I am actually already lost. (Especially for the ML parts). I don't think I am the only one, or in the minority.
The math portions could be explained a little better to help students wrap their head over the concepts.
Keep up the good work
Maybe it's just the math portion, but sometimes the lecture goes a bit fast. But with video playback, it's fine.
Lesser announcements during the mid terms would be appreciated because it can be distracting at times.
none
Could try to relate more to students' abilities. 13 weeks to learn new subjects in uni is not very easy. Spoon feeding is definitely not the solution, but empathy goes a long way.
The midterms were really a huge disaster. Why would you change the question requirements when the question clearly states that the frog can only jump forwards in the first part and could only start to jump backwards from the 1st variant onwards. Even the first version of the answer sheet interprets it that way. I had to change my answer 3 times and still ended up getting it wrong and did not have enough time to even read the alpha beta pruning question which was free marks.

F. SELF-REFLECTION

1. When comparing these results to the previous year's results, what areas have shown improvement?

2. What areas remain to be improved and what are the necessary steps / actions to do so?

3. Are there colleagues who could potentially guide me?

4. Are there issues that require departmental or institutional support?