TEACHER REPORT

Name of Teacher	Min-Yen Kan
Module	CS3244-Machine Learning (LECTURE)
Academic Year/Sem	2020/2021 - SEM 1
Department	COMPUTER SCIENCE
Faculty	SCHOOL OF COMPUTING

Raters	Student
Responded	160
Invited	270
Response Ratio	59%

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.
- 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

I would like to nominate Min-Yen Kan for teaching awards

Comment

- spends extra time to take questions from students and reply to the multitude of forum posts

- Very well prepared materials for online learning especially. Frequent "guests" provide help provide interesting extra info regarding the module.

- Prof Min does not sacrifice the rigour of machine learning concepts and persists to teach the difficult mathematics behind various concepts. I appreciate the Guest Stars component of weekly lectures as they help me to situate the lesson objectives with the bigger picture of machine learning. I am also appreciative of the open–endedness of group projects that allowed me to explore my personal interests although they may be a little more advanced beyond the scope of the module. Thank you Prof Min!

- good teaching effort

- Cares a great deal about student learning and development, goes the extra mile to communicate course material and link it to the real world

- He is invested in student's learning

- Prof Min have organised many help sessions among his busy schedule and also tried to answer our queries as soon as possible.

- Prof Min teaches in a very personal way which shows how much he wants his students to learn and be excited about ML

- He wants the students to succeed. And he is passionate about the subject.

C. STUDENT FEEDBACK SCORES

(i) Rating Score

Question	Average Score (TEACHER)		Average Score Average (TEACHER) (COMPUTER SCIENCE)		Faculty Average (SCHOOL OF COMPUTING)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Overall, the teacher is effective.	3.4	1.1	4.2	0.8	4.1	0.9

Question	Average Score (TEACHER)	Dept Average by Activity & Level (COMPUTER SCIENCE- LECTURE (Level 3000))	Fac Average by Activity & Level (SCHOOL OF COMPUTING- LECTURE (Level 3000))	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.	3.4	3.8	3.8	4.2	4.1

Response Count

9



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.	3.6	1.1	4.2	0.8	4.1	0.9	
The teacher provided timely and useful feedback.	3.4	1.2	4.2	0.9	4.1	0.9	
The teacher has increased my interest in the subject.	3.5	1.2	4.1	0.9	4.0	1.0	
Average of Q1-Q3	3.5	1.2	4.1	-	4.1	-	

Question	Average Score (TEACHER)	Dept Average by Activity & Level (COMPUTER SCIENCE- LECTURE (Level 3000))	Fac Average by Activity & Level (SCHOOL OF COMPUTING- LECTURE (Level 3000))	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.	3.6	3.8	3.9	4.2	4.1
The teacher provided timely and useful feedback.	3.4	3.8	3.8	4.1	4.1
The teacher has increased my interest in the subject.	3.5	3.7	3.7	4.1	4.0
Average of Q1-Q3	3.5	3.8	3.8	4.1	4.0

Department Specific Questions

Question	Avera (TE/	ige Score ACHER)	Dep A (COI SC	oartment /erage MPUTER IENCE)
	Mean	Standard Deviation	Mean	Standard Deviation
The teacher has enhanced my ability to communicate the subject material.	3.5	1.1	4.1	0.8

Question	Avera (TE	age Score ACHER)	Dep Av (COI SC	oartment verage MPUTER IENCE)
	Mean	Standard Deviation	Mean	Standard Deviation
The teacher's attitude and approach encouraged me to think and work in a creative and independent way.	3.5	1.1	4.1	0.9

Question	Avera (TE/	ige Score ACHER)	Department Average (COMPUTER SCIENCE)	
		Standard Deviation	Mean	Standard Deviation
The teacher cares about student development and learning.	3.8	1.1	4.2	0.8

(ii) Distribution of Responses and Additional Statistics

1. The teacher has enhanced my thin	king ability.		2. The teacher provided timely and	l useful feedback.
Strongly Agree (27) Agree (78) Neutral (27) Disagree (17) Strongly Disagree (11) [Total (160)]	% 49% %		Strongly Agree (24) Agree (73) Neutral (27) Disagree (17) Strongly Disagree (18)	46% 17% % 1%
0	50%	100%	[lotal (100)]	50% 100%
Statistics		Value	Statistics	Value
Response Count		160	Response Count	159
Mean		3.6	Mean	3.4
Median		4.0	Median	4.(
Mode		4	Mode	4
80th Percentile		4.0	80th Percentile	4.(
Standard Deviation		1.1	Standard Deviation	1.2
Positive Feedback		66%	Positive Feedback	61%
3. The teacher has increased my inte	rest in the subje	ect.	4. Overall, the teacher is effective.	
3. The teacher has increased my intersection of the sector	rest in the subje % 43% %	ect.	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)]	2% 44% 23% 4%
3. The teacher has increased my intersection of the sector	rest in the subje % 43% % 50%	ect. 100%	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0	2% 44% 4% 50% 100%
3. The teacher has increased my intersection of the second	rest in the subje % 43% % 50%	ect. 100% Value	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics	2% 44% 4% 50% 100% Value
3. The teacher has increased my intersection of the second	rest in the subje % 43% % 50%	ect. 100% Value 160	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count	2% 44% 4% 50% 100% Value 160
3. The teacher has increased my intersection of the second	rest in the subje % 43% % 50%	ect. 100% Value 160 3.5	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count Mean	2% 44% 4% 50% 100% Value 160 3.4
3. The teacher has increased my intersection of the second	rest in the subje	ect. 100% Value 160 3.5 4.0	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count Mean Median	2% 44% 4% 50% 100% Value 160 3.4 4,0
3. The teacher has increased my intersection of the second	rest in the subje % 43% % 50%	ect. 100% Value 160 3.5 4.0 4	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count Mean Median Mode	2% 44% 4% 50% 100% Value 160 3.4 4.0
3. The teacher has increased my intersection of the second	rest in the subje % 43% % 50%	ect. 100% Value 160 3.5 4.0 4 4.0	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count Mean Median Mode 80th Percentile	2% 44% 50% 100% Value 160 3.4 4.0
3. The teacher has increased my intersections of the second secon	rest in the subje % 43% % 50%	ect. 100% Value 160 3.5 4.0 4 4 4.0 1.2	4. Overall, the teacher is effective. Strongly Agree (19) Agree (71) Neutral (36) Disagree (22) Strongly Disagree (12) [Total (160)] 0 Statistics Response Count Mean Median Mode 80th Percentile Standard Deviation	2% 44% 50% 100% 50% 100% Value 160 3.4 4.0 4.0 4.0 1.1

The teacher has enhanced my ability to communicate the subject material.

The teacher has enhanced my ability to material.	communicat	e the subject
Strongly Agree (27) Agree (77) Neutral (25) Disagree (18) Strongly Disagree (13) [Total (160)]	48%	
0	50%	100%
Statistics		Value
Response Count		160
Mean		3.5
Median		4.0
Mode		4
80th Percentile		4.0
Standard Deviation		1.1
Positive Feedback		65%

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.

The teacher cares about student of	levelopment and I	earning.
Strongly Agree (42) Agree (69) Neutral (28) Disagree (11) Strongly Disagree (9) [Total (159)] 0	26% 43% 8% 50%	100%
Statistics		Value
Response Count		159
Mean		3.8
Median		4.0
Mode		4
80th Percentile		5.0
Standard Deviation		1.1
Positive Feedback		70%

(iii) Scale Distribution of Responses



The teacher has enhanced my ability to communicate the subject material.



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	М	F	Overall
The teacher has enhanced my thinking ability.	3.6	3.6	3.6
The teacher provided timely and useful feedback.	3.3	3.6	3.4
The teacher has increased my interest in the subject.	3.5	3.4	3.5

D. STRENGTHS

What are Min-Yen Kan's strengths?

Comments
-
nil
He put in a lot of effort into curating the content for the module and managed to cover many important concepts in machine learning. He also responded promptly to students' questions on the forum.
I can tell that he cares a lot about his students. He provides timely feedback to students and also changes the module a lot after receiving feedback from students.
He explains the materials slowly and patiently, and makes sure everyone in the module is on track with comprehensive newsletters!
I think he is a nice person
Many of the examples Min explained in lecture helped me understand a lot of the content.
He cares about students, updating us frequently about new things, setting up consultation slots, sending us weekly emailsetc. Quite a new personalized touch to taking a module
None
Adapted the module well to an online semester
Dedicates a lot of time and effort into the module.
He speaks very clearly in his tutorials/ lecture videos.
Clarifies a lot of student doubts. Responsive to student questions.
Very approachable and supportive professor who always looks out for his students. Very knowledgeable and passionate in the field

of machine learning

Encourages independent learning and the use of coursemology with the achievements and weekly quiz helps us understand the content better.

Does a decent job with video lectures. They can be quite interesting too.

He is a very nice person and cares about us a lot.

Nice person.

Simplifies concepts when teaching, making it more intuitive.

NA

He tries to give us feedback for our projects.

Prof Kan makes a great deal of effort to try and improve the student experience especially in this e-learning semester. I appreciate all the effort he has made! Thank you prof. He's friendly too.

The pace of the lectures are just right, and the lecturer is generally receptive to feedback and gives useful insights that helps our learning. This lecturer also went ahead to help us orient to the procedure for online assessments, which I find quite helpful.

Good at administration

Tries to record new videos to replace certain outdated content.

Very engaged in his student's learning journey

Prof Min does not sacrifice the rigour of machine learning concepts and persists to teach the difficult mathematics behind various concepts. I appreciate the Guest Stars component of weekly lectures as they help me to situate the lesson objectives with the bigger picture of machine learning. I am also appreciative of the open–endedness of group projects that allowed me to explore my personal interests although they may be a little more advanced beyond the scope of the module. Thank you Prof Min!

i can tell that he is passionate in machine learning

student centric. thanks!

Dedicated.

always want to enhance the quality from the module(e.g. video, notation)

Willing to take feedback

friendly and helpful

Designed the module in an interesting and engaging way.

Cares a great deal about student learning and development

patient

Prof Min puts in a lot of effort and tries his best in overcoming the e-learning aspect of the module.

His AMA lessons should be the main highlight as I learnt the most during those sessions.

friendly, very approachable

Eloquent and fluent in communicating subject material. Provides many channels to help students in learning.

Variety in modes of learning, 'innovations' like the personalised emails, relatively fast response on forums (accessible and convenient for all students to view).

The lecture videos and help session suit my style of learning too (but might not be for others).

Cares towards students, passionate

nil

Generally, I think the flipped classroom lectures, guest spots, and help sessions were helpful. I enjoyed the topical shorter videos instead of a lengthy lecture to digest the information. I think the weekly emails really helped to keep track of what was going on.

He is very kind and approachable when we have difficulties in understanding the materials and cares about those who are behind. He is willing to make more time for help sessions which is very helpful and I am thankful for that.

nil

Breaking down a complex topic into much simpler, bite-sized and easier to understand way.

Relatively interactive with students.

Prof Min is approachable to students' queries.

Clearly interested in making the mod interesting, and he has worked really hard in making it good.

Spends time to answer students questions as he care about understanding.

Comments Prof Min have organised many help sessions among his busy schedule and also tried to answer our queries as soon as possible. sincere about student development and learning, genuinely interested in machine learning himself, super helpful and kind nil engaging and passionate NIL Prof Min conducted many help sessions and encouraged students to seek help from TAs and him. Very flexible, reasonable and understanding prof. Always ready to communicate. Although towards the end of the semester, lectures and materials are often delayed, he was up front to apologize about it. Excellent knowledge Knows his stuff, passionate very clear communication during covid sem, which i really appreciate he does reply to emails rather timely Able to tell that effort is put into the videos. Weekly reminder on to-dos for the week, this is especially needed given the many things. He is a very friendly person. _ Speaks well.

E. AREAS FOR IMPROVEMENT

What improvements would you suggest to Min-Yen Kan?

Comments

Would be good to explain more about the code used in colab notebooks as well as making the lecture material more structured as it is currently quiet messy, in my opinion.

his explainations can be more clear. he seems to skip over some parts (i dont know if he assumes we know it already??) it makes it hard to follow the slides. the slides can be more detailed too to make it easier to understand

can sometimes be a little elaborated, I believe in-depth concepts can be explain in simpler ways

Some of his explanations were not clear as he used certain math terminologies/knowledge which most students taking the course had not learned before (e.g. when explaining Principal Component Analysis).

Work on communication and explanations. Slides should use more visualization before equations, e.g. AdaBoost can learn from Youtube – StatQuest

Some of the lecture videos are quite unclear because they start off very technical without much introduction and I have to turn to youtube videos to understand.

Why is he so busy all the time? The module is poorly executed and poorly managed, late announcements, the MCQ test should not have negative marking, too much content taught in this module, suggest splitting it into ML I, ML II.

NA

Explanations can be quite general / touch and go in many lectures. I understand that you want us to take away the idea, but I think including more concrete examples / problems that you solve during lecture alongside your explanations will allow us to understand the concepts better. Personally, I had a tougher time understanding many ideas because I couldn't really understand what you were trying to convey in the videos, which might be because the explanations were quite general...?

Also, more practice questions that helps students build understanding of the algorithms from the ground up. More calculation questions will help in my opinion. I thought the question on adaboost / decision trees / backprop were quite good in helping me get a grasp on the ideas behind the algos. Perhaps the same can be done with GMM / K–means / Value–iteration (finding the values after several iterations) / Q–learning / Convolutions ...etc. really anything that can be calculated.

There is too much content in this module and the flipped classroom setting adds so much more to the problem.

Find ways to convey the subject matter in a clearer and easier-to-understand manner.

1. I think the notes require some reshuffling. I get the point of splitting into pre and post so that students don't get to overwhelmed (I hope that's the point?) However, it is very choppy when pre only covers maybe 25% of topic A then post covers the remaining 75%. Then, why not just move the entire 100% of topic A into post?

2. Maybe as the notes are being updated, update the videos as well? It will be much easier for the students to watch from the Youtube app itself just in case if they have a personal preference (as it does not help that they can't find certain videos because the labelling is different)

3. Please please double check the calculations in the slides. I had quite a number of times when I was so confused because no matter what I did, I couldn't get the numbers in the slides even though my concept was correct. Only to rewatch the lecture video and realised the lecture video slide has another number. One striking example will be week 10, the lecture example for entropy calculation where both the lecture slide and the lecture video slide had the wrong value.

4. The links to everything are all over the place (in the announcements, in the slides, in some random document in the materials bin) and some of the links are even broken or not updated. This makes it very difficult for us to find materials for certain things. As much as Luminus is user–unfriendly, it is still useable. Maybe send a one time announcement in Luminus with all the master links in week 1 and then use Coursemology announcements for remainder of the semester?

5. Submission of files are quite messy too. Instead of having need to create a google survey for everything which takes time, would Luminus submission folders be a better choice instead?

6. As much as you mentioned you dislike giving fine grained rubrics for the project work component, however, how would we know what to deliver without an adequately detailed rubrics? (Especially for videos) Then, it seems very unfair to us that we are being deducted marks because we do not know what you are expecting. Yes, there are past year posters and videos but that still does not justify for us why we are scoring this mark.

7. I think it might be for the better to change the title of "interim consultation" to "interim presentation of current progress" for clearer explanation of what it is actually for.

8. I appreciate that the explanations of lecture materials uses a lot of analogies so as to help us understand better. However, when the equations come in, everything just becomes very abstract and difficult to understand. It is the case of "I understand how this roughly works but I do not understand how this works in the form of equations". It feels like analogies and the equations are 2 separate entity.

He can improve in explain technical concepts in a more simplistic way so that students will be able to understand better. Also, it will be good if he can update the lecture videos since the slides we are using is updated already. May be better if he speaks a bit louder or more consistent level of loudness.

Videos are harder to digest for me as compared to text/images. Thus, I think making the references for the different sections/topics clearer would help learners like me. Especially the main/more important topics as opposed to the "look here to learn more" topics. For example, when I took CS1231 or CS3243 every lecture had a reference to the textbook. I had difficulty understanding the lectures but going back to the book helped me a lot. It was hard for me to do the same in this module.

He definitely has a good understanding of machine learning concepts but sometimes I feel his explanation is a bit hard to follow. Perhaps for an introductory machine learning course, some of the content can be simplified, but this is just my opinion.

The course material could have been better prepared because some parts are pretty unclear, or irrelevant because the videos were not re–recorded etc.

More detailed explanations in lecture videos and slides will be greatly appreciated instead of expecting students to search on their own

There are some topics that are very abstract or difficult to understand but because lectures are in video form some questions cannot be asked during lecture time, only through the video comments.

Breadth of the module is too large, leaving quite little room to explore any topic in depth. Results in a shallow understanding of most topics

Perhaps explain some concept slowly. For example, the PCA slides were very brief and I had a very hard time understanding that.

However, I think he didn't explain well about 50% of our contents. Plus random parameters here and there. To survive from this module I have to watch a lot of tutorials online and read relevant articles.

The lectures are very hard to understand. A lot of the concepts are not explained clearly. I feel like there are a lot of assumptions about students' understanding of the materials, which is actually not the case. In fact, there are many online resources that explain the concepts much clearer and more comprehensible, which I suggest Prof should take a look.

NIL

Be more timely in releasing assessments, lecture notes, tutorial solutions and tutorials. Often times, the lecture video did not provide a good summary of the content. I had to google more than i listen to lecture video. I ended up spending way more time than the expected contact hours in studying the content o this topic as i often need to spend a lot of time outside lecture timings to catch on the content.

Maybe reduce the math when teaching concepts or at least make the slides clearer and use more anecdotes when teaching, since students weaker at math are unable to grasp concepts well if the lecture notes are just all math equations

Prof Kan could be more organised >< Some of the anxiety from this module came from how disorganised information was being disseminated... I understand that forums are important, but there were many times important information related to exams and projects are left in scraps of forum posts. As a result, we often have to comb through each forum post to get all the information needed. It would be great if important information can be posted as a consolidated post on the announcement page where everyone is sure to see.

Set final exams on reading week or actual examination week instead as this is a relatively content heavy module for students who are new to Machine Learning or who may have heavy commitments within or outside school (e.g. overloading modules, which I did this semester due to practical circumstances).

Please explain jumps u make between notations, alot of notations are also scrambled and resused for different semantics.

Can be clearer in some of the explanations (especially the mathematical stuff)

Notations used could be made clearer(eg what is lambda and J_cost in terms of the current lecture)

Some videos are outdated, and some contents in PPTs are not well explained. Have to go for online materials for better understanding.

make the lectures interactive. It is very difficult to learn machine learning from videos. Maybe improve on the math portions cuz the explanations are not really clear.

Current module structure is very disorganised, with the use of multiple platforms for information dissemination (Coursemology, CS3244 website, forum, e-mail). Could consider standardising all important information in one platform for ease of reference.

Information about deliverables/exams can be better. Currently, it is all over the place (Coursemology, forum, email). On occasion, the information is only released so close to the deadline.

slides have errors

Very bad slides, not useful when revising. I had to learn most of the techniques and algorithm myself online as the lecturer is very bad at explaining them. Very lost in all the lectures as he did not explain well the concepts. I hope that he can improve on his teaching skills and slides.

There are too many topics to be covered in one semester honestly. Having 1 big topic every week is just too rushed!

spend more time in class instead of steps

Can afford to explain the math more in lectures. A lot of things are too abstracted

Talk slower and explain a little bit more (for video)

The way you split the lecture notes are really confusing. Like there's half of CNN in the pre then the other half in post with RNN or something else in the middle. It made it really hard to learn sequentially.

The mathematical notations parts are a bit messy...I understand the content well in stats modules but find similar theories hard to grasp in CS3244...

Should explain mathematical equations and notations used instead of just throwing it in the notes.

to have better slides, very messy slides.

please have neater notes, need more consolidation. everything is everywhere

i feel like i can't ask for help. My TA doesn't reply to my emails, and I feel like there is no platform for me to ask question comfortably. Exam too messy. Too much instruction and distraction. Even the TAs invigilating seems v confused, never say when to start.

The content for the main lectures are extremely difficult and not explained well. There is a great disparity between the AMA lectures and main lectures as Prof explains things extremely well during AMA lectures. Concepts such as backprop and other mathematical formulas are explored without much depth or examples and was extremely difficult to understand.

too much content, tutorials too difficult based on what is taught in lecture, i was unable to keep up at all

NIL

Stop the notation dump, concepts and proofs should be explained without assumption of prior knowledge. The course is extremely math heavy but there is very limited guidance on this aspect. The course also assumes prior knowledge of python and the SKlearn / pandas libraries which not everyone is familiar with. More coding can be done in this module with step by step introduction.

Might be because the module is an introduction module for machine learning but I wish the content was gone through more indepth. I felt I didn't do much coding for this module too, but I understand it isn't the main essence of the module.

lecture video quality needs to be improved

I think it would help to send out the Coursemology announcements through email as well. For some of the videos, the slides in the videos did not match the updated ones we were given. This was very confusing at times.

In lecture videos, each topic could use more examples to link up all the related sections' theory parts, otherwise it's hard to see the whole picture when first learning it.

Also, the explanation given in videos of more complicated topics can be more detailed to help with deeper understanding. Explain like how you explained in help sessions, then less people would need help sessions.

The lecture notes can also be more detailed such that without referring to the video itself, the logical flow between the sections can also be understood. Now the slides is only a visual aid to the lecture videos, but not a revision material we can refer to.

Also, maybe can try to speak faster.

please rethink how u can teach the content

N/A

Would recommend reducing the workload of the module, partially because you have overworked yourself this semester. Higher workload affects students, TAs, and profs. Might be better to reduce the workload so that you can be more effective at responding to students.

I think the module is run in a fundamentally incorrect way. Our current learning model is:

Concept->Math->Example->Colab notebooks for implementing the math->Tutorial for deeper understanding of the math->Exams testing the ability to manually run the algorithm->Project testing ability to...???

Here's how I recommend changing it -

1. Do away with the math initially. Only have it when absolutely everything else has been explained. It's easy to slap on a summation symbol, but a lot harder to explain what something is doing.

2. Move NN, DNN, RL etc to an earlier stage, preferably before the midterm.

3. Only start the project after midterms, so students know what they are signing up for.

4. Reduce the scope of the project. Currently, most students don't have a clue about what they are doing unless they have prior experience.

5. Exams testing ability to manually run algorithms are quite weird because how is that relevant? Especially when I can just use an online tool to run the algorithm. The move towards CA is good, but you can't still have a "disguised" finals.

6. Colab notebooks should not ask us to reimplement algorithms that are already implemented. People always complain that ML resources and documentation are lacking and that the barriers to entry are really high due to the gap between theory and the libraries – you can be that gap! Use the notebooks to teach us how to use Keras/Tf/PyTorch! Otherwise we're simply stumbling and googling and while that is a useful skill, the class can't claim credit for forcing us to google.

Explain the topics taught more clearly, and the intuition behind each topic.

release information about tests and exams earlier as announcements

Faster replies to emails and questions on Forum

would have preferred if there wasn't a pre and post but instead just a lecture as a whole

Some videos need to be remade.

A lot of things. Materials are all over the place. Some programming questions here and there is not helping in the understanding, and in fact makes some things even more complicated. Please stop dumping notations after notations without explaining what they mean. If you are just going to read off from the notes, might as well suggests to us some Youtube channels that can explain better. Seriously frustrated with this module and might be one of the worst module I have ever done in NUS.

Some changes have to be made to the lesson structures and project grading system. It does not seem fair to grade all project groups on their project presentations when he was not personally there to ask questions and clarify his doubts. As such, adaptions have to be made so that he can handle a large cohort better.

Prepare lecture videos earlier and not use past year videos that are not updated and not aligned to the lecture slides. Contents of the lecture slides should be checked again as there are many mistakes and errors which confuses students. There could be more aligned and standardised marking scheme that the TA and lecturer use when grading project segments as TA's expectations differs from lecturer's expectations most of the time. Most of the time, I was learning from lecturers on youtube as they are more detailed and less vague hence lecture materials are not useful for me and in fact confused me sometimes.

The lectures could be clearer (develop the concepts and ideas step-by-step). Most of the time it is fine but sometimes the jumps are really sudden and it takes me a lot of time to understand the gap (especially in following mathematical proofs).

Content taught can be clearer

Better slides

i personally dislike the flipped classroom learning. if i wanted to watch video lectures, honestly there are better ones out there (sorry).

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Your explanations for lectures on Monday were much clearer than your flip-classroom videos. Just use those instead of the current one, which sometimes miss the details here and there.

The e-learning classes are completely not working and classes are disorganized. It's unclear where to get the class information from and module content seem to go week by week with students not having clarity to be able to plan ahead. Consider using piazza as well.

Provide more explanation for mathematical proofs (or new expressions). Provide a list of resources to refer to for more information for each set of slides.

I would prefer the normal lecture style. The format of pre and post leads to more than stated time required for this module and the work load is quite intense as some of us might be new to ML. Would be good to have a warning somewhere that this module requires some prior experience with ML.

WOuld it be possible to have a consolidated of the pre and post videos for each on youtube so that don't need to keep clicking back to coursemology for each section. It breaks the momentum of studying!!

Also, would be good that the exams dates and formats, etc are given to us at least one month in advance. And each section only have 25min is slightly unreasonable especially during covid and home exam. Need to take into account that not everyone have the best exam conditions and some might have construction taking place and not able to hear the zoom instructions at all!! I do not get why we need to record our screen since we are already able to google. This makes me laptop fry.

Lastly, it would be good to upload the instructions on luminus as well. Also, content wise, would be good if you can first present the content (idea behind the algo), followed by any code involved, then lastly the math. and breaking up into pre and post makes it hard to study. should go from top down.

Please make the notes more informative, ie more words and less pictures.

Please conduct live lectures

Go more in-depth into the mathematics behind concepts such as PCA.

Go through some example questions in lecture and not just content.

Might want to consider choosing TAs that are knowledgeable in this module or have at least understand the concepts that are taught.

the terminology / language used sometimes not very precise which made things confusing

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?