



Subject Summary Report for 1930 TECHELECT - 01.112 : Machine Learning

Creation Date: **Monday, December 30, 2019**



The Subject Summary Report shows scores and feedback of the subject.

Response Table

| Raters | Student |
|----------------|---------|
| Responded | 112 |
| Invited | 118 |
| Response Ratio | 95% |

Subject Evaluation

What are the best three things about this course (if any)?

| Comments |
|--|
| 1) Prof Lu Wei 2) The rigorous breakdown of the math behind the models |
| Structured |
| The profs are really knowledgeable and often encourage the class to ask questions. Work load is just nice, not too much or too little. Number of hours of class per week is really good too. |
| Prof Lu |
| learn interesting things project is interesting prof Lu wei breaks things down very well for us to understand |
| The Prof. explain the mathematical equation clearly. The pace of the teaching is right |
| 1. Nice learning approaching 2. Nice topic covered 3. Good homework for practice |
| the deduction part is good, the homework is on spot |
| Project-focused, excellent class notes, very interesting + relevant topic |
| Content |
| LuWei teaches very well |
| I like the subject Lu Wei is a great instructor and can teach concepts well Subject workload is very reasonable |
| Teaching materials Assignments Explanations |
| Homeworks reinforce learning, concepts are well supplemented with notes, in class questions are useful |
| Interesting content |
| 1.prof 2.homework 3.combine slides with whiteboard |
| Lu Wei, syllabus and homework |
| Interesting concepts. |
| Professor Lu Wei inspires me to study Machien Learning with his great lessons and explanation |
| interesting course, applicable learning |
| understanding profs |
| Lu Wei, night classes |
| Learnt a lot. |

| Comments |
|---|
| Instructors were good and patient. General flow of the course was good! |
| good slides |
| Prof. Lu Wei, Course structure, Homeworks |
| – Important to know – |
| It really helped me to understand the math behind the machine learning models |
| Comprehensive content, great lecturing, just right workload |
| The math behind machine learning |
| The course provides a solid theoretical foundation for machine learning applications. |
| The professor is very enthusiastic in teaching |
| Being able to engage with the mathematics behind machine learning |
| Learning new algorithms for machine learning, applying the algorithm in code and having the chance to practice it |
| The depth of the courses, the instructor could explain the hard concept very well |
| learned about machine learning |
| in depth machine learning concepts |
| interesting topic, slides are very good, manageable work load |
| Content and Project is rigorous. Instructor knows his/her materials well. |
| 1. The course was good in introducing the basic concepts of machine learning to someone who has no prior experience with it 2. The notes were useful |
| –The lecture notes –The structure of the lectures |
| Projects |
| Materials provided |
| – Recaps at the beginning of each lesson are very helpful. – Project was interesting and relevant to the content taught in the course. |
| Course curriculum, professors, and project. |
| Nice content, great instructor, helpful homework and project. |
| The project was cool |
| Decent range of machine learning techniques introduced. Good materials provided (but needs effort to understand) Good course lead |
| Informative, hands on with coding, theoretical |

What are the three things that you would like to see improved (if any)?

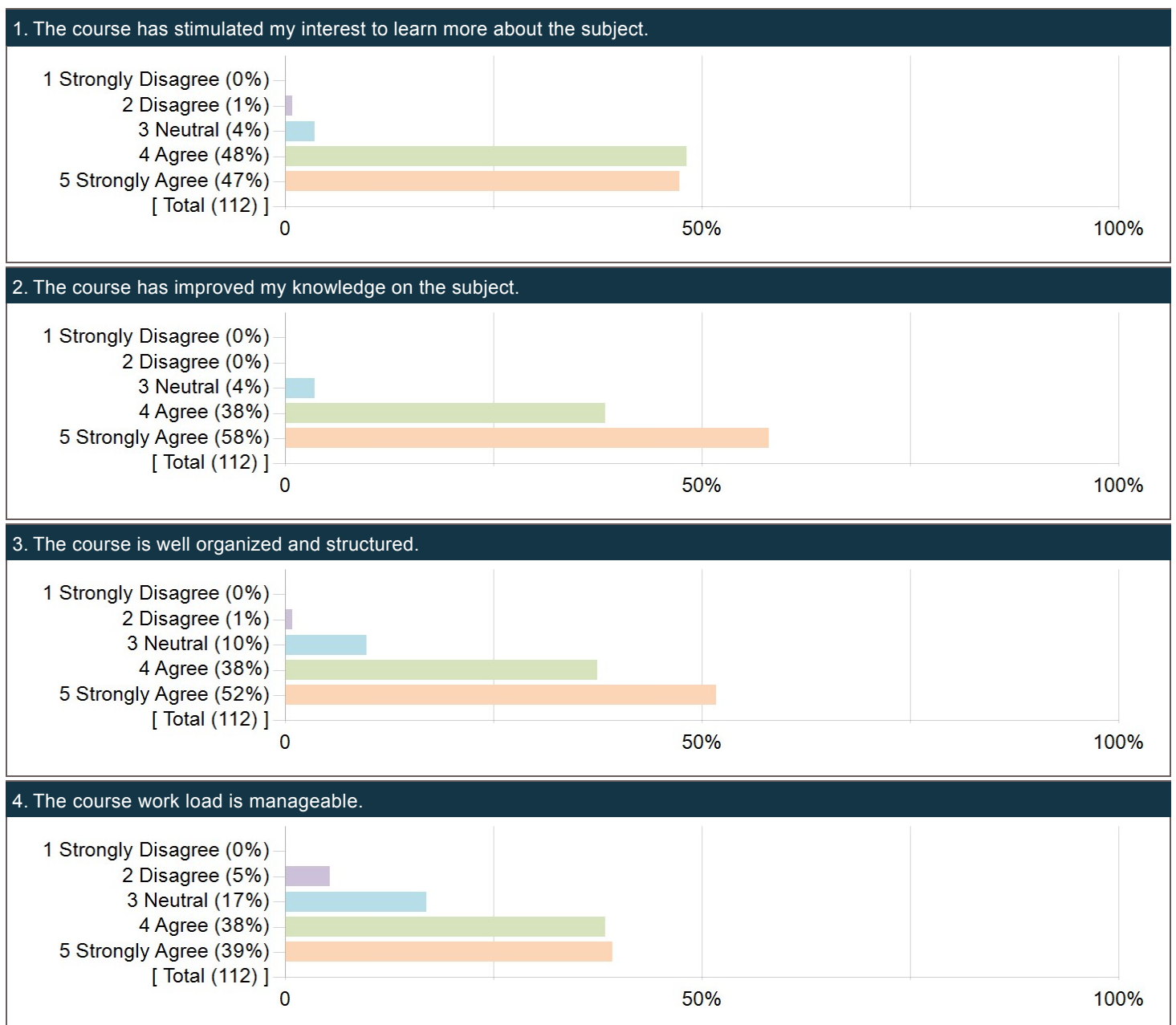
| Comments |
|--|
| 1) Maybe a clearer idea on the applications e.g where else other than NLP can HMM be used for? |
| Humanly understandable explanations |
| There could be more guidance given to coding homework questions. |
| Please release slides a week in advance, at least. Please don't just read from the slides. When there are difficult equations, please take the time to work them out on the board slowly and go through them slowly. |
| No. |
| upload slides before class |
| 1. Topic could be more specific 2. More homework like weekly |
| Shorter classes (2 hours at a time felt overwhelming), less focus on homework in grading scheme, more self-directed project |
| NIL |
| Project can be more interesting |

| Comments |
|--|
| NIL |
| NIL |
| Teaching style |
| more time can be given for the project |
| – |
| 1. too much on NLP 2. need more homework 3.N/A |
| not really! I'm quite satisfied w the content. |
| 1) Clear learning objectives detailed and listed from the start of the course. 2) Clear timeline listed instead of suddenly getting notifications about homework / receiving details about our midterm only a week or so before our paper. Things like cheatsheets need time to be prepared. 3) Professors knowledge on how to use the microphones in class so that we can actually hear them clearly. |
| – |
| speed of the course, more examples for further understand the meaning |
| More time to do homework (esp those that requires coding), can release the homework earlier. |
| more practice in class |
| – Having more workable examples and sample questions to refer to, other than the homework(s). |
| 1. More math workings in slides 2. Slides to be given before lesson in the first half of term |
| Perhaps have the TAs around during class and have some time for solving a problem given by the lecturer where the TAs could help |
| Explanation in the first 5 weeks |
| – Initially homeworks were demanding |
| Nothing. |
| More time spent on explaining the use case and application of different models |
| Relaxing restrictions on the usage of certain external libraries (such as NumPy) would lift a great deal of work off the shoulders of students without compromising on learning outcomes. |
| The project is way too hard for 20% of our grade |
| Lecture clarity on the bigger picture, notes and slides |
| slides can be standardized. notes doesn't help that much as the slides. |
| better sound system in the classroom. can barely hear from the back of the class and hence crowds in the front. |
| The mathematical equation should be delivered in a more layman term |
| 1. If the project could have been released earlier, perhaps in the first half of the term. 2. I think that using the whiteboard would be better instead of using slides |
| –Having exercise sessions with teaching assistants |
| Lecture notes |
| If someone does not understand something, try to explain it differently, not the same way over and over. Use e.g. real-life examples, solve a small problem, etc. |
| None, all good. |
| 5 pm deadlines? 11:59 pls |
| Assignments deadlines should be at 11.59pm instead of sometimes 5pm to align better with the rest of the school |

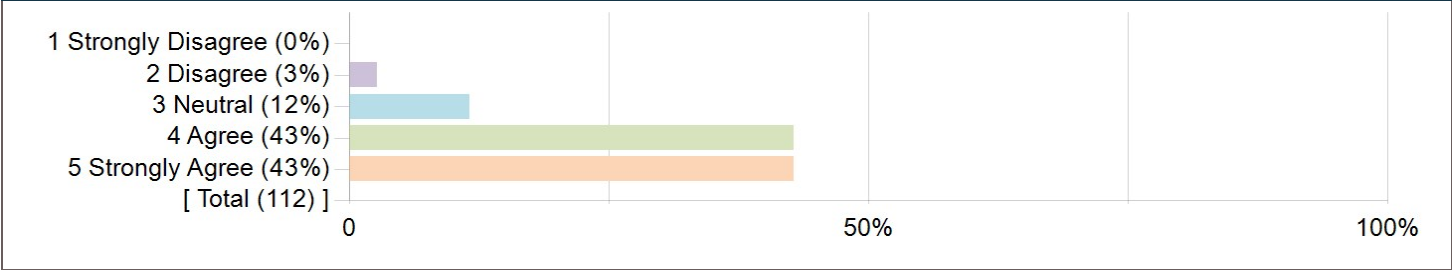
Overall scores.

| | Mean | Median | Mode | SD |
|---|------|--------|------|-----|
| The course has stimulated my interest to learn more about the subject. | 4.4 | 4.0 | 4 | 0.6 |
| The course has improved my knowledge on the subject. | 4.5 | 5.0 | 5 | 0.6 |
| The course is well organized and structured. | 4.4 | 5.0 | 5 | 0.7 |
| The course work load is manageable. | 4.1 | 4.0 | 5 | 0.9 |
| The course involved me in active learning experiences. (Active learning is any approach to teaching in which all students are asked to engage in the learning process. Commonly, students will engage in small or large activities centered around writing, talking, problem solving, or reflecting.) | 4.3 | 4.0 | 4,5 | 0.8 |
| After going through all the classes and assessments, I will be able to do what is prescribed in the learning objectives (Please see links below). | 4.3 | 4.0 | 4 | 0.7 |
| Overall, I would rate this course as: | 4.4 | 4.0 | 5 | 0.7 |

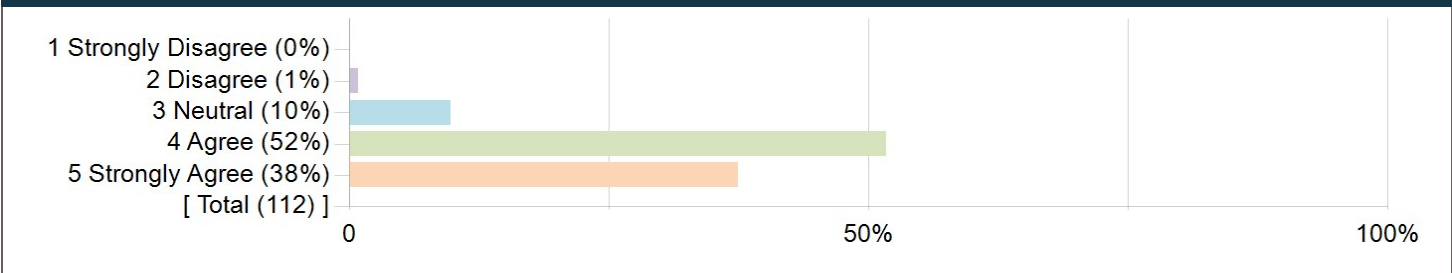
The frequency charts shows the number of times a particular answer was selected.



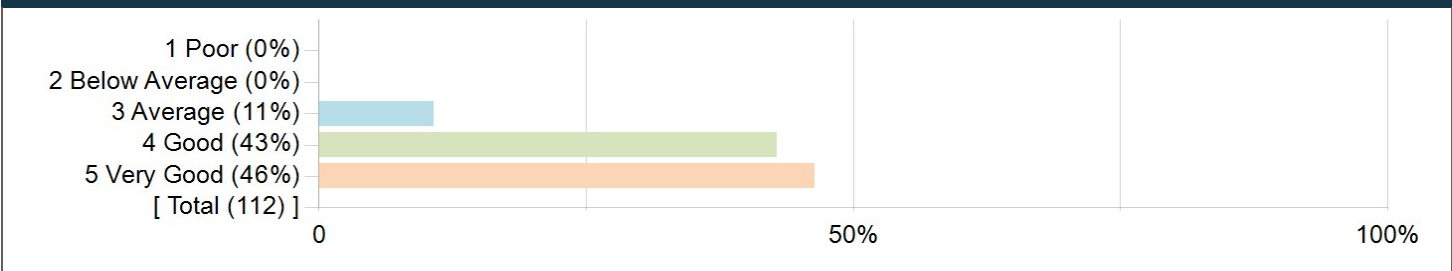
5. The course involved me in active learning experiences. (Active learning is any approach to teaching in which all students are asked to engage in the learning process. Commonly, students will engage in small or large activities centered around writing, talking, problem solving, or reflecting.)



6. After going through all the classes and assessments, I will be able to do what is prescribed in the learning objectives (Please see links below).



Overall, I would rate this course as:



Comments about the Subject

| Comments |
|--|
| Second half was awesome! |
| Excellent course in general in terms of the content delivered and the pace they are delivered at. |
| Very interesting. Nicely breaks down machine learning algorithms for students to understand. Very organized! |
| It is too technical for me as I understand close to nothing. |
| The best course I've ever taken in SUTD |
| I like the machine learning course, it teaches the basic things about ML and lays a good foundation for me |
| Finally, a legit course out of ML, Database, CDS... |
| NIL |
| -NIL- |
| Good introduction to basics of ML |
| very little time and practice to understand in depth. |
| the course is challenging enough and helps me to improve critical thinking for math. really appreciate the coding homework. learnt a lot from those and project. |
| Too fast-paced for someone who is not very bright. |
| inclusion of pseudo-code will aid the understanding |
| Professor Lu Wei is great. One of the best instructors I have had in SUTD. |
| Good structure. First half of the term could be better |
| A very good course that lays a mathematical and intuitive foundation for students who are interested in machine learning. |
| I feel taht the course is good however, we need more of application perspective and not just the content. A lot of time i understood the lesson but i am not too sure the point of what I am learning until the exam. by then i feel that it is too late. |
| this is a very good course especially for machine learning fundamentals. |
| Great foundational course for machine learning. |
| Machine learning project to be more guided |
| This course gives a very good introduction to ML. |



Creation Date: **Monday, December 30, 2019**

The Instructor report shows scores and feedback of the instructor.

Response Table

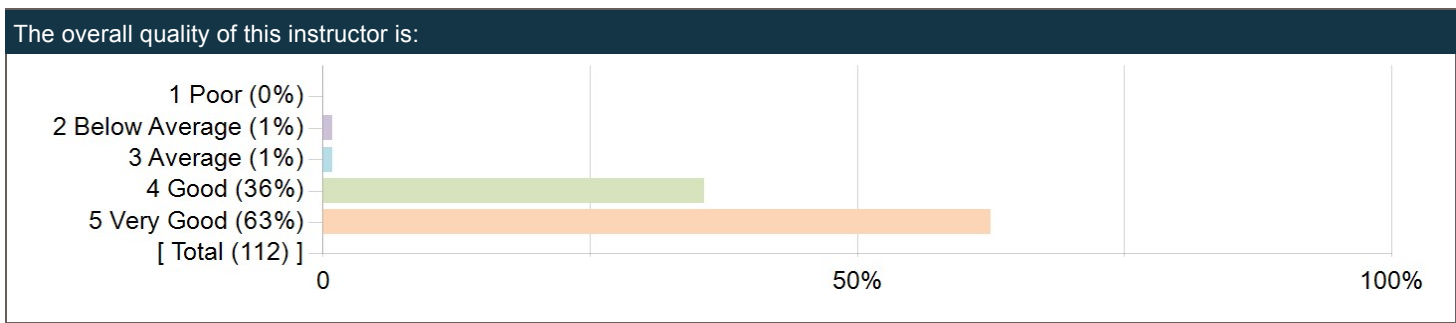
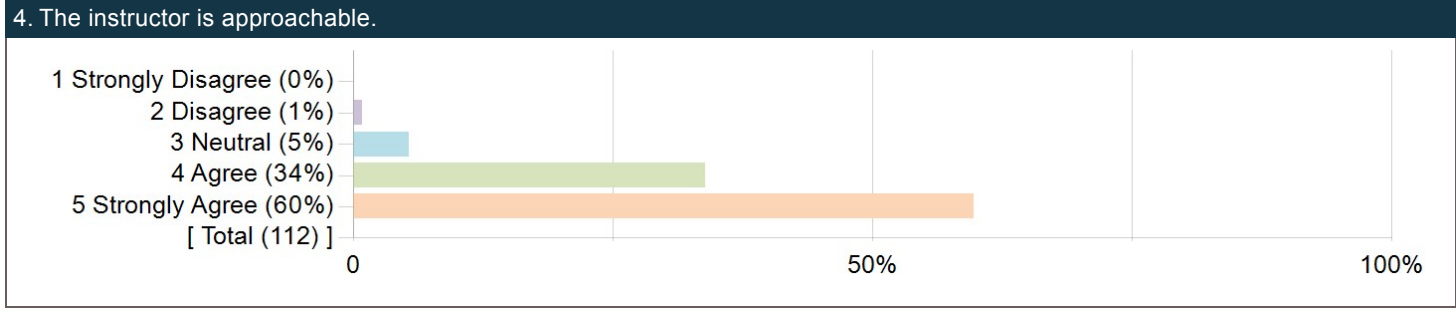
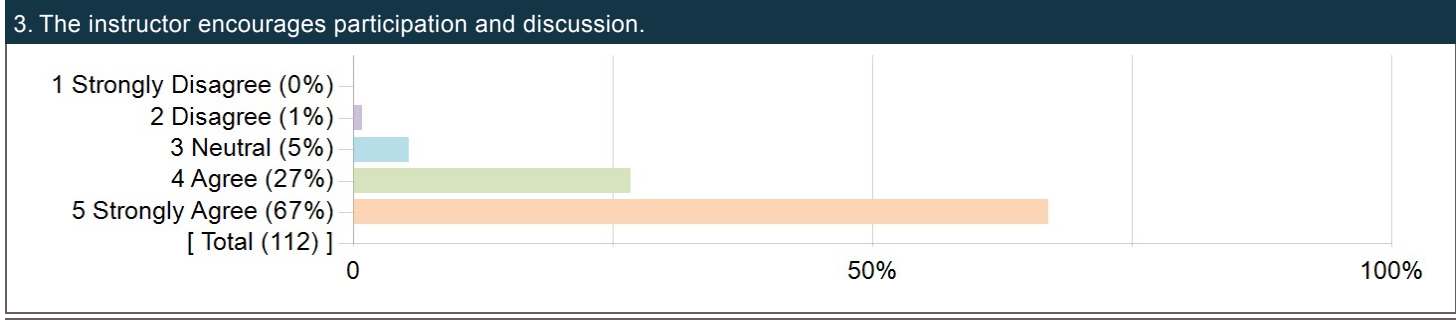
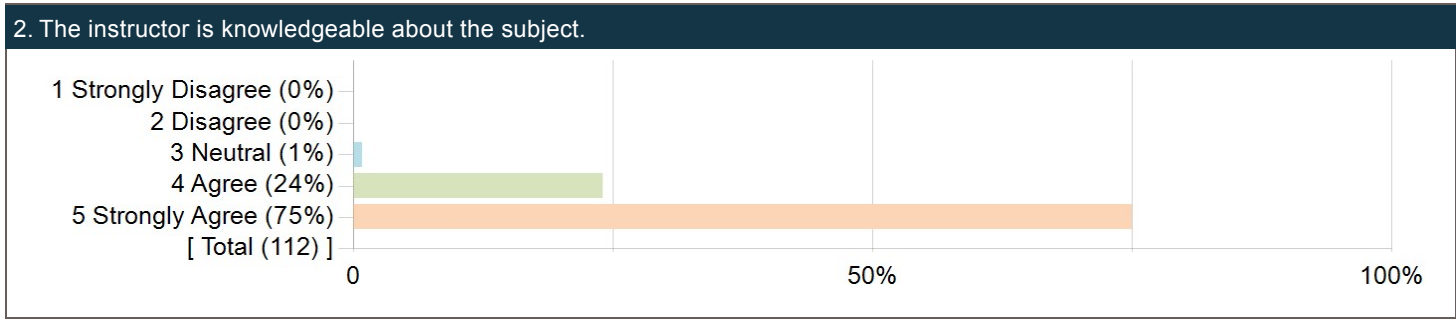
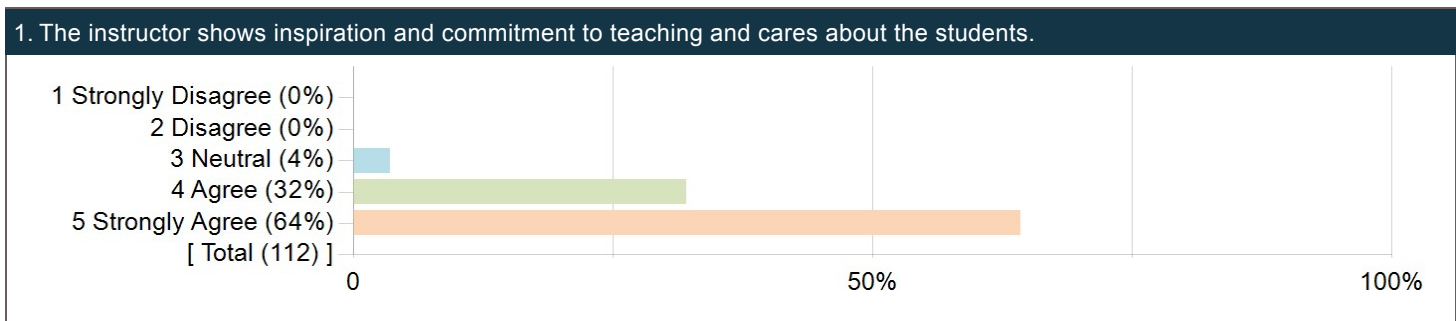
| Raters | Student |
|----------------|---------|
| Responded | 112 |
| Invited | 118 |
| Response Ratio | 95% |

Instructor Evaluation

Overall scores.

| | Mean | Mode | Median | SD |
|---|------|------|--------|-----|
| The instructor shows inspiration and commitment to teaching and cares about the students. | 4.6 | 5 | 5.0 | 0.6 |
| The instructor is knowledgeable about the subject. | 4.7 | 5 | 5.0 | 0.5 |
| The instructor encourages participation and discussion. | 4.6 | 5 | 5.0 | 0.6 |
| The instructor is approachable. | 4.5 | 5 | 5.0 | 0.6 |
| The overall quality of this instructor is: | 4.6 | 5 | 5.0 | 0.6 |

The frequency charts shows the number of times a particular answer was selected.



Comments about Wei Lu

| Comments |
|--|
| Thank you for the awesome lectures prof! |
| I feel like the slides can be more detailed, difficult to follow notes and lesson during prof lu wei's segment |
| Excellent in breaking down complex concepts. Slides and notes are simple to understand. |
| Very knowledgeable in Machine Learning concepts AND breaking down concepts for students. An experienced professor! |
| He has really solid foundation and knowledge about the subject. He explains everything in detail and I think he is one of the best professor in SUTD!!!!!!!!!!!!!! Many other profs don't care much or simply are not good at teaching. I feel respected when I take this course from how he introduces the ideas, gives examples and explains mathematical detail behind models. Excellent prof!!!!!!!! |
| Thank you Prof. You are awesome! |
| He is very patient and knowledgeable. I like his teaching style and really enjoy it. |
| very dedicated and experienced prof, encourages thinking and deducting. |
| Very knowledgeable and fun |
| Prof is knowledgeable about the content |
| - |
| Love the step by step derivation and explanations by Lu Wei :) Great prof |
| Slides are well designed and straight to the point. I have a much better grasp of the content described in the second half of the class |
| It's good when we can actually hear him. Otherwise sometimes he mumbles and doesn't speak into the mic and it's hard to hear. |
| Very professional, knowledgeable and answers questions well. |
| Very clear in teaching, good :) |
| Very passionate and patient. Really like his classes and how he breaks down the math |
| Very good instructor. Explain concepts very well at a good manageable pace. |
| No better person to deliver this content |
| Excellent at giving lectures and guiding students, explaining difficult concepts smoothly, knowledgeable. |
| Good in teaching, clear with the math and able to draw it out. Explanation sometimes gets confusing |
| Thanks prof! |
| He is very passionate and his lecture is very very good. Understood every lecture taught by him |
| Very good prof who can explain complicated ML concepts clearly |
| clear and concise explanation |
| knowledgeable and good prof. One of the prof in SUTD that really can teach well and make the topic easy to understand |
| explaining things on the board really helps. |
| Great professor with a well of knowledge on the topics. |
| Really enjoyed his class and he is able to explain things very clearly |
| Very good professor, dedicated towards helping students learn. I enjoyed taking his class. |
| best professor |
| Good, but hard to find outside of office hours |