



**Graduate Course Evaluation for Julian McAuley
Department of Computer Science and Engineering**

CSE 258 - Recommender Sys&Web Mining
Section ID 947930
Section Number A00
Fall 2018

**Number of Evaluations Submitted: 215
Number of Students Enrolled: 370**

1. The Instructor displayed proficient command of the material.

167 (78.0%): Strongly Agree
41 (19.2%): Agree
3 (1.4%): Neither Agree Nor Disagree
3 (1.4%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
1: [No Response]

2. The Instructor was well-prepared for class.

166 (77.9%): Strongly Agree
42 (19.7%): Agree
4 (1.9%): Neither Agree Nor Disagree
0 (0.0%): Disagree
1 (0.5%): Strongly Disagree
2: [No Response]

3. The Instructor's voice was clear and audible.

141 (66.2%): Strongly Agree
59 (27.7%): Agree
10 (4.7%): Neither Agree Nor Disagree
1 (0.5%): Disagree
2 (0.9%): Strongly Disagree
0 (0.0%): Not Applicable
2: [No Response]

4. The Instructor was accessible to students outside of class (office hours, e-mail, etc.).

141 (66.2%): Strongly Agree
62 (29.1%): Agree
9 (4.2%): Neither Agree Nor Disagree
1 (0.5%): Disagree
0 (0.0%): Strongly Disagree
2: [No Response]

5. The Instructor was approachable, courteous and showed interest and concern for students' learning and understanding.

146 (68.9%): Strongly Agree
54 (25.5%): Agree
7 (3.3%): Neither Agree Nor Disagree
3 (1.4%): Disagree
1 (0.5%): Strongly Disagree
1 (0.5%): Not Applicable
3: [No Response]

6. The Instructor presented material in an intellectually stimulating way that gave students deeper insight into the material.

140 (66.0%): Strongly Agree
56 (26.4%): Agree
13 (6.1%): Neither Agree Nor Disagree
2 (0.9%): Disagree
1 (0.5%): Strongly Disagree
0 (0.0%): Not Applicable
3: [No Response]

7. The Instructor promoted and encouraged questions and discussion.

138 (65.1%): Strongly Agree
61 (28.8%): Agree
12 (5.7%): Neither Agree Nor Disagree
1 (0.5%): Disagree
0 (0.0%): Strongly Disagree
3: [No Response]

8. The Instructor organized class activities in a way that promoted learning.

138 (65.1%): Strongly Agree
55 (25.9%): Agree
13 (6.1%): Neither Agree Nor Disagree
3 (1.4%): Disagree
3 (1.4%): Strongly Disagree
3: [No Response]

9. The Instructor provided feedback (written/oral) in a way that promoted learning.

130 (61.9%): Strongly Agree
59 (28.1%): Agree
16 (7.6%): Neither Agree Nor Disagree
3 (1.4%): Disagree
2 (1.0%): Strongly Disagree
5: [No Response]

10. The Instructor is actively helpful when students have difficulty with course material.

133 (63.0%): Strongly Agree
57 (27.0%): Agree
16 (7.6%): Neither Agree Nor Disagree
2 (0.9%): Disagree
1 (0.5%): Strongly Disagree
2 (0.9%): Not Applicable
4: [No Response]

11. The Instructor interacted well with students and treated them with respect and courtesy.

151 (71.2%): Strongly Agree
54 (25.5%): Agree
5 (2.4%): Neither Agree Nor Disagree
0 (0.0%): Disagree
1 (0.5%): Strongly Disagree
1 (0.5%): Not Applicable
3: [No Response]

12. The Instructor was clear about course expectations.

145 (68.4%): Strongly Agree
54 (25.5%): Agree
8 (3.8%): Neither Agree Nor Disagree
2 (0.9%): Disagree
3 (1.4%): Strongly Disagree
3: [No Response]

13. The Instructor was clear about standards for evaluation.

141 (66.5%): Strongly Agree
49 (23.1%): Agree
14 (6.6%): Neither Agree Nor Disagree
4 (1.9%): Disagree
4 (1.9%): Strongly Disagree
0 (0.0%): Not Applicable
3: [No Response]

14. I would recommend this instructor overall.

136 (64.5%): Strongly Agree
62 (29.4%): Agree
8 (3.8%): Neither Agree Nor Disagree
3 (1.4%): Disagree
2 (0.9%): Strongly Disagree
4: [No Response]

15. What is your overall rating of the Instructor?

144 (67.9%): Excellent
54 (25.5%): Above Average
10 (4.7%): Average
2 (0.9%): Below Average
2 (0.9%): Poor
3: [No Response]

16. General comments about the Instructor's performance

Please keep your comments constructive and professional, abiding by the Principles of Community

- Amazing professor. Really helpful and his dry humour kept the class entertaining.
- Awesome class
- Excellent teaching approach
- Good
- Grading criteria should be better worded. Many students were confused about gradings of one assignment.
- Great
- Great
- Great professor. Actually enjoyed going to lecture, and his assignments are very good.
- GREATEST

- He is very good. Wish I could learn more and 10 weeks didn't seem be enough
- His class is easy to understand. And the assignments are carefully designed. I learned a lot from these two assignments.
- I find it very telling that the professor's office hours were usually the day right after the homework was due, i.e. when very few people have started the next homework yet. I'm a TA, and I know from experience that very few students go to office hours when they've just submitted their homework, and flood the place the day before. At worst, the professor is trying to avoid contact with his students, and at best is unintentionally scheduling his office hours at the most unhelpful time.
- I got the impression that he reuses the same material from previous years a lot, and he has a very set script for what he would say during lecture. And then when people asked questions he would get a slightly startled look, answer it, then return to the script. It wasn't necessarily bad, the material was good and the things he was saying were informative, but it felt rather robotic.
- I think Professor Julian is patient and take his lecture seriously.
- McAuley truly knows his stuff! Super knowledgeable guy who explains concepts in an easy to understand manner, and provides all the resources necessary for students to succeed.
- needs a better pen for his classes - that piece of junk keeps breaking down mid-lecture
- One of the best courses I've ever taken. He was careful about everything, even helped deal with exam time conflicts. Also lectures were well-organized and I learned so much. Thank to him and hope him all the best!
- pretty good
- Prof. McAuley has displayed an outstanding ability to teach and captivate the attention of his students. He shows an excellent command of the material, and I command him for the relevance of his material. Prof. McAuley's teaching abilities make the 80-minute lecture uniquely enjoyable, and his ease at public speech smoothens the lesson. Congratulations!
- Professor chooses his words in lectures carefully. The more I listen, the more sense and better clarity I get
- Professor McAuley was very approachable and had an excellent command of the course material. By making Assignment 1 a Kaggle competition, he pushed the students to be creative with turning theory into practice. The examples he had in his slides were highly intriguing, especially the algorithm of the team that won the Netflix prize. I would definitely like to take another class from him.
- Super nice and knowledgable.
- The class lectures in no way prepared us to complete the assignments given in class. The material taught after the midterm was quickly glossed over even though it reflects the title and description of the class, most of the learning was done outside of class using google.
- The Instructor helped me learn a lot in machine learning.
- The Instructor knows well about the material but seems not to pay too much attention on writing clear annotations on the slide. It is impressive that all the past podcasts and slides are on the website for review.
- The professor is clear and concise in his lectures, and worked to ensure student understanding with examples and demonstrations that go beyond just showing how but also explaining why

- The professor's lectures are pretty nice and organized. However, sometimes I could not understand the writing of the professor immediately during the class. BTW, the homeworks are a little easy for those who have had some experience in this area.
- The voice is a little bit plain and make it easy to skive from class.
- Very good
- Very good professor. He is as cool as his style of teaching.
- Very good.
- well prepared and express well the insight
- Went through the material pretty fast with pp slides. A little bit monotonic in voice, so hard to concentrate through 1 hour 20 min. BUT, a good instructor with humor.

17. The course material was intellectually stimulating.

126 (60.9%): Strongly Agree
 60 (29.0%): Agree
 18 (8.7%): Neither Agree Nor Disagree
 3 (1.4%): Disagree
 0 (0.0%): Strongly Disagree
 0 (0.0%): Not Applicable
 8: [No Response]

18. The materials for the course (textbooks, handouts, etc.) were useful and well organized.

116 (55.5%): Strongly Agree
 65 (31.1%): Agree
 20 (9.6%): Neither Agree Nor Disagree
 4 (1.9%): Disagree
 1 (0.5%): Strongly Disagree
 3 (1.4%): Not Applicable
 6: [No Response]

19. Grading was constructive and assisted learning.

117 (56.0%): Strongly Agree
 63 (30.1%): Agree
 16 (7.7%): Neither Agree Nor Disagree
 7 (3.3%): Disagree
 4 (1.9%): Strongly Disagree
 2 (1.0%): Not Applicable
 6: [No Response]

20. What is your reason for taking this class?

69 (33.2%): Core Course Requirement
43 (20.7%): Subject Area Requirement
25 (12.0%): Elective
71 (34.1%): Interest
7: [No Response]

21. What were the particular strengths of this course?

- - Extremely structured material
- - Well organized course in terms of lecture to assignments etc.
- A great introduction to a lot of machine learning concepts and recommender system.
- A lot of code assignments, so I think it is great for those students who want to have more practices in machine learning.
- Application on data analysis.
- assignments and homeworks
- Assignment on Kaggle
- Assignments are very good.
- Assignments, and homeworks
- Basic knowledge about artificial intelligence and we could design a recommend system in the class.
- Clear, even beginners like me can understand.
- Closely related to application
- course was equally effective in podcast as in real class! I did not feel that I missed anything by not attending the class.
- CSE258 is a perfect course where one can learn subtle but crucial strategies when tackling a machine learning problem. It has direct connection to real-world applications, which is really exciting. The course material was easy to follow. Four homework and two projects were sufficient and manageable.
- Easy introduction to Machine Learning without being too in-depth about the math, great intro for students where all the resources are given to succeed.
- Good job of introducing us to machine learning material. I didn't have any experience with it before, but the homeworks were good. Sometimes there's a lot of theory and derivations in the lectures that isn't ever looked at again, and it feels like a waste of time especially for a class that is supposed to be more "practical".
- Have many projects
- Help me get hands-on excersize.
- I implemented some projects related to machine learning.

- I like assignment1 and assignment2. They are challenging in a good way. Student needs to brainstorm.
- Implementing recommendation system using kaggle competition
- interesting project
- It allows students to spend time doing projects they are passionate about.
- It was not theoretical heavy, but a more practical approach which I really liked. Homeworks and assignments were interesting and not to long.
- Learn basic machine learning from the beginning
- learn something about ml and ds
- lots of data available for practice, introduction to many different methods of classification, focus on practical application instead of theory, open ended questions to stimulate critical thought
- Lots of fascinating concepts.
- Practical use of machine learning concept
- Practical.
- Practicing what I learned from the class in assignments, such as in Kaggle competitions.
- Real code experience in recommender system and machine learning
- Some interesting study results are presented in the lecture, such as the relationship between the number of nodes and the number of edges in a social network. I think this made the lecture more interesting. Also, some questions on the test and the homework are open-ended, which encourages me to think more.
- strong
- Students can gain hands-on experiences building recommendation systems.
- The assignments were very nice
- The course is structured around a lecture/podcast and assignments which directly connect to the course content. I appreciate how the professor goes over aspects of the work and its application in lecture as this facilitates hands-on learning when working on assignments later
- The course provides us with more knowledge and intuition on building a recommender system. The topics are closely-applicable to real-life applications. It is a lot fun doing a final project on open-ended problems.
- The knowledge is usefull
- Tricking me into thinking I would learn the course description
- useful
- Very good instructor.
- Very practical
- Very practical course, no tedious theory, but helpful.

- very useful and give us a lot chance to practice
- well lectured

22. What suggestions do you have for making this course more effective?

- - Multiple Kaggle contests instead of one Kaggle contest since it helps students be comfortable with the interface prior to that and in terms of approaches to the contest. Maybe one Kaggle task as part of every homework
- Midterm with coding assignment (Some questions had multiple possible answers/interpretations and having some amount of coding with the midterm helps in terms of evaluating understanding.)

If not too much effort, a midterm taken online with minimum time and multiple choice questions and with multiple possibilities for feature engineering questions (in terms of code for answers deviant from the answer key will help majorly)

- 1. professor's office hours need to be streamlined - I thought it was a bit weird that students just hung out at his office shooting questions instead of lining up outside for 1 on 1s.
- Add contents about neural network.
- add more project
- Allow more time for the final project and make the Kaggle competition less stressful. I think the Kaggle competition encouraged a negative competing environment which might not be good for promoting learning.
- Can include final exam. And maybe stress(require mastery) a bit more on the math foundation of the ML approaches could be useful.
- Code more
- Could introduce more about Deep Learning
- Don't make Kaggle performance relative to other students in the class part of the grade, promotes pay to win (students who had GPUs could run neural nets), and it made it very stressful to try and get full score because you'd never know if you'd get toppled
- Give us access to computational resources!! I have an old laptop that takes forever to run even the base code that we get in class. Assignment 1 completely wrecked my laptop, took 14+ hours to run on my computer. Grad students don't have access to ieng6 unless the class explicitly allows it, so I didn't have any class-given resources. Or put on the pre requisites for the class that you need to have a laptop that isn't 10 years old
- Great course
- If the course can provide note (not PPT in handwritten way) that would be better.
- In the class, the instructor usually replies directly to a student's question without letting everyone understand the question clearly first. It would be appreciated if the instructor could repeat the questions asked by someone first to get people on the same page before answering.
- it would be better if the time for midterm is longer than one hour
- Maybe give a lecture to introduce the latest development in some areas related data mining.

- More challenging programming assignments.
- More concepts should be covered about recommender system.
- more deeper knowledge
- More frequent and smaller touch points for assessment. While the 4 homeworks and 2 projects were useful I feel mastery is better developed when more opportunities for reflection on learning occur, but obviously with more frequent checkpoints the content has to be delivered in smaller chunks
- more homework
- no suggestions
- None. The course is well-structured.
- nothing
- One big problem of the course structure is that it gives an overview of the recommender systems without explaining any particular topics in details. Sometimes, the professor might breeze through PCA, SVD in one lecture without explaining the significance of it and the nuances in which way they are implemented in certain applications. In the end, this type of course structure makes students become more reliant on professor's code and instructions without cultivating the actual ability to solve creative problems in the real world. To deal with this problem, I have two suggestions:
 - 1. Compile a write-up documents with all the proofs or derivations of algorithms introduced in class, so the professor can still simply go over them in class to save time and for those who are interested in learning in depth, they can do some additional reading after class
 - 2. Emphasize why certain algorithms are used in what circumstances, and part of the homework should be asking students to reason through the different recommender systems, just like what we see in the midterms.
- Please add homework for the later sections of the course. Topics like advertising and community networks were really great, but also complicated. Even the earlier part of the course was made clear to me while I was doing the homework assignment when I ran into code bugs and discussed with the TAs. Even if the homework is optional it will be greatly beneficial for learning, so please add at least one more homework for the next time.
- Professor McAuley could take attendance.
- Some concepts should be taught in more details such as the ones which were asked in midterm. I think the course doesn't pay much attention to theory, which it should so the we can have better intuition about what we are implementing.
- Spend more time on the later material and give insight into why the methods would or wouldn't perform well. If a method is not known to perform well, then either state this, or don't mention it. This course needs much more transparency in the grading scheme, the grading scheme seemed completely arbitrary.
- The course content is ambiguous on the topic, as the algorithms/principles are less explained during the class. Instead, many algorithms are just listed without too much explanation.

What is more, there is one project that is graded purely depending on the competence of students within the class. However, the instruction for the project is not clearly illustrated making students believing that the grade is based on many criteria other than the pure rank of competence which is not true. In addition, the competence of the project is less playable, as a slight adjustment of the parameter may lead an increase of your record by a very little value,

but raise your rank by a large amount. That is to say you need to spend many hours just adjusting the parameters to beat your classmate by luck.

From my feeling, it is much better to provide more models that may help students to understand the way we deal with the data, even some sophisticated models, instead of just playing with several parameters in a simple model.

- The grading policy of the assignment is different from the request of the assignment in the beginning. In order to get a better grade distribution, the instructor changed the threshold of the grading policy of the assignment, which he didn't mention a word before we handed in the assignment. The unclearness of grading of the assignment makes students so confused.
- The writing of the professor on the formula derivation ...
- There could be less demo about coding itself.
- We could more theory based problems in our assignment so that we can better understand the materials in class.

23. I would recommend this course overall.

130 (62.2%):	Strongly Agree
62 (29.7%):	Agree
10 (4.8%):	Neither Agree Nor Disagree
6 (2.9%):	Disagree
1 (0.5%):	Strongly Disagree
6:	[No Response]

24. What is your overall rating of this course?

137 (65.9%):	Excellent
50 (24.0%):	Above Average
17 (8.2%):	Average
2 (1.0%):	Below Average
2 (1.0%):	Poor
7:	[No Response]

25. What are the most important concepts that you learned in this class that you expect will be useful in the long term?

- A variety of real world applications of recommender systems was covered. Homeworks were well designed.
- Applying various algorithms on a dataset and developing knack to better it
- apply methods to dataset. just do it
- Applying Latent factor models for recommender systems. How to build ML models from scratch.
- Better understanding of basic learning method and recommendation system.
- building a recommender system

- collaborative filtering
- Feature engineering, Overfitting, Underfitting, Validation, Handling unbalanced data, Regularization, Dimensionality Reduction, Latent Factor Models
- How to involve in text mining from preprocessing to models.
- how to use data to predict, rate or recommend something.
- latent factor
- Latent Factor Model
- Latent Factor Model, because during the process of implemn
- Latent factor model, social networks, text mining, recommender systems, knowledge discovery
- Latent-Factor Models
- Logistic Regression, SVM, Similarity measurements, Bag-of-Words, TF-IDF, Social Network, (too many)
- Machine Learning
- machine learning skills
- machine learning, gradient descent
- Mining data and methods and models to deal with text data
- Nothing I didn't already know.
- practice of applying recommender systems, evaluating models
- Predictive analysis in general
- Python and its library
- python use
- recommend system
- Recommendation needs to consider both items and people
- Recommender System
- Recommender Systems
- Recommender Systems and Text Mining
- SVM, ngram, regressions, latent factor model are useful. Honestly, all advanced techniques are useful.
- Text mining
- Using python to solve some problems.
- why to use different machine learning approaches, not just how

26. Do you have any other comments to add to your evaluation?

Please keep your comments constructive and professional, abiding by the Principles of Community

- Assignment 1 is kind of hard for me. I personally don't understand the meaning of making competition ranking part of the assignment grade.
- Assignment 1 is sad. I spent long time and learned nothing.
- Great
- I don't have really have time to write this review since Assignment 2 is due tomorrow and, as with Assignment 1, I am racing to finish it. The quarter is already rushed enough; the fact that our last assignment was due before classes even finished is ridiculous and not making the best use of the time allotted, in my opinion.

Having an assignment on Kaggle was cool, but the fact that our performance was worth so much of our grade was really demoralizing. I had never done a competition like that before, and to my mind, I did exactly what the instructions said to do, yet my performance didn't improve much, and I was penalized for it. I understand that many other people's performance did improve, but in the case of the purchase prediction, it was because they did something I literally would have **never** thought of. I went to the TAs' office hours THREE times, and they never suggested anything even remotely helpful. As for the ratings task, to this day I still have no idea what was wrong with my code. So what have I learned here?? Nothing.

I furthermore take issue with the way the deadlines for Homework 3 and Assignment 1 were scheduled. Professor McAuley said that Homework 3 was laying the groundwork for Assignment 1. Since the deadline for Assignment 1 was mere days after the deadline for Homework 3, I allocated only that much time to do it, and especially since I understood what to do in order to complete it, that amount of time seemed sufficient. As I alluded to above, however, it clearly was not. If you think your students should devote 2 weeks to an assignment, then you need to have the deadline of the previous assignment (particularly one that the second assignment depends on) 2 weeks prior.

I felt completely blind-sided by the difficulty I experienced on that project. I told the professor that I had struggled with it, and his response was: "Well, a third of the class isn't having any problems with it." This sort of comment is completely demeaning and unhelpful. I don't know what the prior experience of those people are. Maybe they've even had jobs in data science. Maybe they're colluding and passing around hints of what worked for them. The fact is that 2/3 of the class were, by definition, **not** in the top third. That's the majority of your class, professor. Are you just going to dismiss them because they're not doing as well as the top third? That's not what teachers are supposed to do. They're supposed to teach.

- I feel very lucky to have taken CSE258. I would like to thank Professor McAuley for making it a rewarding and inspiring experience.
- The podcasts are a phenomenal service to the class, as they allow for more in-depth review and understanding outside of class
- The professor was sometimes sarcastic and rude to students.
- While I enjoyed the Kaggle competition and learned a lot from it, I thought the expectations were a little vague in retrospect. This has been hashed out on Piazza so without going further I think that better communication in the assignment spec would solve the surprise most students felt after the grades came out. Separately, (I add that I haven't seen my final grade yet) I wasn't sure of the rubric after I realized that I lost about ~10% of my final grade because my predictor performed poorly on a relative basis - when I first submitted a result to Kaggle I was

150th on the leaderboard and the next day 400th (!). I may be wrong to disagree with the rubric, but a small suggestion I could make is to weight the grade more heavily towards the report part of Assignment 1. Aside from that, enjoyed the class.

Please note that any responses or comments submitted by evaluators do not necessarily reflect the opinions of instructors, Computer Science and Engineering, Academic Affairs, or UC San Diego. Responses and comments are made available without auditing or editing, and they may not be modified or deleted, to ensure that each evaluator has an opportunity to express his or her opinion.