

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

CSE 258 - Recommender Sys&Web Mining
Section ID 983563
Section Number A00
Fall 2019

Number of Evaluations Submitted: 163
Number of Students Enrolled: 351

1. The Instructor displayed proficient command of the material.

118 (74.2%): Strongly Agree
39 (24.5%): Agree
2 (1.3%): Neither Agree Nor Disagree
0 (0.0%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

2. The Instructor was well-prepared for class.

117 (73.6%): Strongly Agree
38 (23.9%): Agree
4 (2.5%): Neither Agree Nor Disagree
0 (0.0%): Disagree
0 (0.0%): Strongly Disagree
4: [No Response]

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

119 (74.8%): Strongly Agree
33 (20.8%): Agree
6 (3.8%): Neither Agree Nor Disagree
1 (0.6%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

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

112 (70.9%): Strongly Agree
36 (22.8%): Agree
8 (5.1%): Neither Agree Nor Disagree
2 (1.3%): Disagree
0 (0.0%): Strongly Disagree
5: [No Response]

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

114 (71.7%): Strongly Agree
40 (25.2%): Agree
4 (2.5%): Neither Agree Nor Disagree
1 (0.6%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

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

110 (69.2%): Strongly Agree
39 (24.5%): Agree
8 (5.0%): Neither Agree Nor Disagree
2 (1.3%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

7. The Instructor promoted and encouraged questions and discussion.

113 (71.5%): Strongly Agree
39 (24.7%): Agree
5 (3.2%): Neither Agree Nor Disagree
1 (0.6%): Disagree
0 (0.0%): Strongly Disagree
5: [No Response]

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

109 (69.0%): Strongly Agree
34 (21.5%): Agree
13 (8.2%): Neither Agree Nor Disagree
2 (1.3%): Disagree
0 (0.0%): Strongly Disagree
5: [No Response]

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

103 (64.8%): Strongly Agree
43 (27.0%): Agree
10 (6.3%): Neither Agree Nor Disagree
1 (0.6%): Disagree
2 (1.3%): Strongly Disagree
4: [No Response]

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

103 (64.8%): Strongly Agree
49 (30.8%): Agree
5 (3.1%): Neither Agree Nor Disagree
2 (1.3%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

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

112 (70.4%): Strongly Agree
41 (25.8%): Agree
5 (3.1%): Neither Agree Nor Disagree
1 (0.6%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

12. The Instructor was clear about course expectations.

112 (70.4%): Strongly Agree
39 (24.5%): Agree
5 (3.1%): Neither Agree Nor Disagree
3 (1.9%): Disagree
0 (0.0%): Strongly Disagree
4: [No Response]

13. The Instructor was clear about standards for evaluation.

109 (68.6%): Strongly Agree
36 (22.6%): Agree
8 (5.0%): Neither Agree Nor Disagree
5 (3.1%): Disagree
1 (0.6%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

14. I would recommend this instructor overall.

110 (69.2%): Strongly Agree
42 (26.4%): Agree
7 (4.4%): Neither Agree Nor Disagree
0 (0.0%): Disagree
0 (0.0%): Strongly Disagree
4: [No Response]

15. What is your overall rating of the Instructor?

111 (70.3%): Excellent
41 (25.9%): Above Average
5 (3.2%): Average
1 (0.6%): Below Average
0 (0.0%): Poor
5: [No Response]

16. General comments about the Instructor's performance

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

- A very good course for anyone who wants to start learning recommender system.
- Appreciated how hands-on the instruction was for the majority of lectures. I liked the material and how clearly everything was presented.
- Clear expression and a good sense of humor
- Clear lecture, helpful demos in class
- Excellent
- Excellent!
- Great instructor with interesting examples and illustrations to make the notes clear and make us get interested in the world of Data Mining.
- Great teaching.

- I am in awe that Julian provided a rigorous machine learning course for hundreds of students. Very well organized. I learned and relearned a great deal, and this course helped me with interviews. Often Julian would explain a concept in an intuitive manner, and I would realize that I had rigorously proved this concept in an earlier class but didn't morally understand the concept.
- I greatly appreciated the Python demos given in class.
- I liked Julian overall as a professor, but to address some of the items here where I gave him an average/below average review: there were times when I wasn't exactly sure what the point breakdown was for assignments (ex: A1, A2). I know that Julian said he was reserving full marks for the best solutions, but it seemed like if we beat the weak baselines for A1 and got close to the strong baselines we wouldn't be penalized too heavily; however, I know many students who performed a lot worse than they thought they would based on Julian's responses on Piazza.
- Julian is wonderful.
- Nice
- Nice class!
- Nicely structured course
- The instructor is a good performer in class and I learn a lot from his lecture.
- the instructor is clear about the content.
- The instructor was brilliant for this course. Concepts were put forward in a very likeable manner and I truly believe even someone who wasn't interested in the subject would develop an interest for it. Even some of the drier material was covered very well.
- The professor gives clear explanation of each concept. He also provide detailed examples to let us understanding the concept better.
- This class is perfect for beginner of Machine learning
- Very knowledgeable and great lectures

17. The course material was intellectually stimulating.

| | |
|--------------|----------------------------|
| 102 (64.2%): | Strongly Agree |
| 50 (31.4%): | Agree |
| 5 (3.1%): | Neither Agree Nor Disagree |
| 2 (1.3%): | Disagree |
| 0 (0.0%): | Strongly Disagree |
| 0 (0.0%): | Not Applicable |
| 4: | [No Response] |

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

101 (63.5%): Strongly Agree
45 (28.3%): Agree
11 (6.9%): Neither Agree Nor Disagree
2 (1.3%): Disagree
0 (0.0%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

19. Grading was constructive and assisted learning.

93 (58.5%): Strongly Agree
45 (28.3%): Agree
13 (8.2%): Neither Agree Nor Disagree
6 (3.8%): Disagree
2 (1.3%): Strongly Disagree
0 (0.0%): Not Applicable
4: [No Response]

20. What is your reason for taking this class?

52 (32.9%): Core Course Requirement
33 (20.9%): Subject Area Requirement
26 (16.5%): Elective
47 (29.7%): Interest
5: [No Response]

21. What were the particular strengths of this course?

- A nice introduction to Recommender Systems.
- Broad overview of techniques used in recommender systems
- easy to pass.
- Excellent lectures
- Good assignments and homeworks that allowed students to learn by implementing the systems discussed in lectures.
- Good breadth of material covered. However, it really depends on how much one wants to get out of it. I personally read lots of papers and implemented them for both Assignment 1 and 2, and the material from lectures sort of provided a good base for that.
- I liked the additional resources that Julian posted online, such as example code (super helpful for HWs). I also enjoyed the open-endedness of A2 since I got to explore an area that was more interesting to me - but I wish it wasn't assigned over Thanksgiving break (my teammates were hard to reach/communicate with over this time period).

- It is not very hard at the beginning so it is friendly for students without strong background in CSE.
- It let us understand the concept and using method of tools and models which are widely used in recommendation system.
- many meaningful projects
- Many resources
- Most of the homeworks had some basic code already which provided a good start. This was very helpful.
- Overall easy to understand
- Overall knowledge of the topics.
- pace was good, and the preparatory material in first two weeks is very much appreciated for those with no Python/machine learning experience
- Practical
- Professor is great.
- Project.
- Recommend SYstem
- Starting from basic ideas about machine learning, the course goes all the way up to state-of-the-art methods. It is a good start into the machine learning field for students without previous experience.
- The course was very well-prepared and organized, and the instructions for each assignment and homework were very clear. The instructor and the teaching-assistants were also very responsive and helpful to student's questions and concerns. The instructor was also very clear in this lectures, which makes the material easy to understand and extremely interesting to learn.
- The homework assignments stressed important points - e.g., how removing a subset of a model's weights could affect the remaining ones, potentially even causing them to change sign. I feel that these kinds of nuances would be easy to miss when designing assignments, so I'm glad we had these.
- The instructor's examples and illustrations are very creative and useful for students to understand the corresponding concepts in Data Mining.
- The lectures were easy to follow and the coding examples were very useful in seeing how to apply the concepts to real data.
- This course pay more attention to the real application of machine learning models in different dataset.
- This course was a really good introduction to machine learning and data mining especially for someone who is fairly new to the field. The course isn't particularly hard and still ensures the material is understood by the students. The course is coding heavy without worrying about the unnecessary details especially from an application standpoint which I really enjoy.
- Very close to the actual work.
- Well it give me a review on what I have learned in COGS 118AB and 181

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

- Although I think Julian has a strong command of the material, I don't think that the lectures are particularly engaging; I often find myself lost or disengaged from what is being talked about so I stopped going to lecture. It could partially be my fault for not finding all of the proofs, etc. particularly interesting but it would be nice if it was more engaging/there were more questions asked (maybe clicker questions to check for understanding? or simple raise your hand type questions).
- Assignment 1 design should be improved. That assignment is ranked. The score is a little bit surprising because we thought we can get full 5 marks by beating the "Strong baseline". During that assignment, we try different ways to improve our solution to get a better position on the leaderboard. However, for one of the two tasks, the best possible improvement I could make is to exploit the feature of the test data, instead of using any methods we talked about in the class. I think that I learned a lesson, not any methods.
- Assignment 1 shouldn't be made so competitive. One of my friends had to drop it because he didn't perform well in the Kaggle competition.
- Assignment 2 was a bit too broad.. maybe the content could have been made more specific.
- cut down the class size. make the content more specialized and dense.
- Don't drop 1 HW
- Easier Midterm.
- Give more detailed code samples for students to gain a better understanding
- Highly disappointed with the grading system in place. 25% points depend on a Kaggle contest which significantly affects the grade. In a class with an absolute grading policy, a relative scoring system doesn't seem appropriate to me - everyone should be able to get full credit.

On a different note, I think more emphasis should be given to implementing models yourself to some extent. I observed SEVERAL people who simply plugged in libraries and did decently well without even knowing what model was being used by the library - which is very sad, to be honest.

I understand implementing everything from scratch is time-consuming. However, even a basic constraint such as using only libraries like Tensorflow (etc.) for gradient computation, or sklearn should help. Otherwise, it's literally people using SVD,SVD++ and super-fancy latent models without knowing how they work which shouldn't be the point of the course.

Even with Assignment 2, exactly what is expected to get full credit is not clear to students. And with a grading policy that puts everyone on the borderline, it is a bit unfair and stressful.

I do appreciate the course contents though. Focuses more on breadth than depth, but that's okay.

- I think it can reduce some time on equation derivation. Because we just import the package and use the api when using those models.
- I think one of the assignments encouraging competition between students can be very stressful.
- I want to learn more depth about the course material

- I would have found it easier to understand/connect with the professor if the professor used the blackboard more often. The pen on the slides makes the professor avoid writing as much as possible(which means important equations are already on the slide without clear explanation) and also looks very shabby as compared to writing on the blackboard. I understand that it could be a personal preference but I believe that I would have grasped a lot of the concepts better and faster if the professor used the blackboard to write out the math and graphs along with the slides for images instead of the pen on the slides directly with the equations already in them.

I also think that using a kaggle challenge as an assignment that counts towards 25% of the grade is a bad idea. The challenge on its own is a great idea I believe and maybe even two challenges with lower/no scores attributed to them is a lot better. The kaggle challenges in themselves are super fun, competitive and interesting but when our grade depends on it, it can get very stressful and I believe leads to a lot of cheating. This makes it not truly reflective of the efforts an individual has made for the competition. I have seen that there is large amounts of cheating in this challenge as the evaluation is entirely based on the leaderboard. Students can very easily reuse code/methods as the code doesn't have to be submitted and the grading is based entirely on the ranking. I believe the high grade dependence increases stress and leads to cheating and very unfair results to students who are making genuine efforts and not a true representation of the efforts of the student. I would however like to reiterate that I really enjoyed the kaggle challenges if only they were conducted more fairly and graded more fairly as well.

- introduce an (optional) homework on networks to reinforce learning
- More series of relevant courses
- More time for assignment two... I would be happy to work on it through to the end of finals so I could take on a more interesting issue.
- Need some HW for the class after midterm.
- Nop.
- Offer more offclass material
- Perhaps, we should have two Kaggle competitions instead of one Kaggle competition and a group project.
- Please don't grade students depend on how well other students do
- Skip the linear regression stuff, more NN plz.....
- The grading for assignment 1 is completely based on a competition. This is stressful because it is also supposed to count for the comprehensive exam. It would be better if a small portion of the assignment's grade was based on this competition or maybe if the competition was kept as an optional homework. Also, the midterm was too conceptually very challenging - it didn't reflect the level that the lectures were at.
- The material covered in the first few weeks could be skipped(added as pre-requisite) and more material on recommender systems should be covered. Also, almost all of our grade depends on the first half of the course and nothing on the last three weeks. This should be changed so that all the material gets about equal weight.
- While the midterm was certainly doable in well under an hour, I feel that having it last only an hour (as opposed to the entire class time) made it needlessly stressful. Also, Assignment 1 was stressful and I felt that it punished those who worked on it early. I'd gotten to the top 20 of each leaderboard a few days before the deadline, so I figured I was safe and proceeded to

ignore the assignment to work on a different class. I looked at the leaderboards again a few hours before the deadline, only to find that I was very wrong about being safe.

23. I would recommend this course overall.

| | |
|-------------|----------------------------|
| 96 (62.3%): | Strongly Agree |
| 46 (29.9%): | Agree |
| 9 (5.8%): | Neither Agree Nor Disagree |
| 2 (1.3%): | Disagree |
| 1 (0.6%): | Strongly Disagree |
| 9: | [No Response] |

24. What is your overall rating of this course?

| | |
|-------------|---------------|
| 99 (63.5%): | Excellent |
| 45 (28.8%): | Above Average |
| 11 (7.1%): | Average |
| 1 (0.6%): | Below Average |
| 0 (0.0%): | 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?

- Basic idea and methods of Machine Learning
- Basics of unsupervised learning, recommendation algorithms and web scraping
- building classifiers
- collaborative filtering
- Collaborative Filtering, PCA, measurement tools like precision and recall, etc.
- Creative and critical thinking in model diagnosis.
- How to find useful information in bunch of data
- How to implement simple recommender systems and how to scrape simple datasets from the web.
- I have a better grasp of how classifiers can behave with respect to seemingly small changes.
- Jaccard Similarity
- Jupyter notebook
- kaggle
- knowledge about Python and Recommender System.
- Latent Factor Models

- Linear Regression Models, Regularization, Classification Models, Model Quality Metrics.
- Linear/Logistical Regression and MSE
- Logistic Regression
- loss function
- Machine Learning
- Many perspectives of analyzing a dataset and different methods to solve problems
- Many skills in Python
- N
- Recommendation system
- Recommender Systems, Web Mining, Latent Factor Models, Dimensionality Reduction, Social Network Analysis
- RS
- several ways (such as TPR, BER, recall, precision...) to evaluate a model
- Text mining
- The basic knowledge of machine learning.

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

- I think the course is overall too general since it is open to students from different levels. and the class size is way too big.
- Thank you for teaching this class.
- Well-structured course that gave me enough but not too much knowledge that I need to know.

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.