



Course and Instructor Evaluation Summary Department of Computer Science and Engineering

McAuley, Julian John
CSE 158 - Recommender Sys&Web Mining (A)
Fall Quarter 2017

Number of Students Enrolled: 325
Number of Evaluations Submitted: 138

PLEASE COMMENT ON THE FOLLOWING:

1. Your class level is

0 (0.0%): Freshman
0 (0.0%): Sophomore
11 (8.1%): Junior
120 (88.2%): Senior
3 (2.2%): Graduate
2 (1.5%): Extension
2: [No Response]

2. Your reason for taking this class is

87 (68.0%): Major
1 (0.8%): Minor
0 (0.0%): Gen. Ed.
30 (23.4%): Elective
10 (7.8%): Interest
10: [No Response]

3. What grade do you expect in this class?

65 (52.8%): A
52 (42.3%): B
5 (4.1%): C
1 (0.8%): D
0 (0.0%): F
0 (0.0%): P
0 (0.0%): NP
15: [No Response]

GENERAL QUESTIONS

4. I learned a great deal from this course.

3 (2.4%):	Strongly Disagree
6 (4.7%):	Disagree
9 (7.1%):	Neither Agree nor Disagree
62 (48.8%):	Agree
47 (37.0%):	Strongly Agree
0 (0.0%):	Not Applicable
11:	[No Response]

5. How many hours a week do you spend studying outside of class on average?

1 (0.8%):	0-1
8 (6.3%):	2-3
18 (14.3%):	4-5
27 (21.4%):	6-7
30 (23.8%):	8-9
21 (16.7%):	10-11
7 (5.6%):	12-13
6 (4.8%):	14-15
3 (2.4%):	16-17
1 (0.8%):	18-19
4 (3.2%):	20 or more
12:	[No Response]

6. How often do you attend this course?

40 (31.7%):	Very Rarely
49 (38.9%):	Some of the Time
37 (29.4%):	Most of the Time
12:	[No Response]

COURSE MATERIAL CSE 158

7. The course material is intellectually stimulating.

2 (1.6%):	Strongly Disagree
6 (4.8%):	Disagree
5 (4.0%):	Neither Agree nor Disagree
61 (49.2%):	Agree
50 (40.3%):	Strongly Agree
0 (0.0%):	Not Applicable
14:	[No Response]

8. Assignments promote learning.

2 (1.6%):	Strongly Disagree
4 (3.2%):	Disagree
5 (4.0%):	Neither Agree nor Disagree
61 (49.2%):	Agree
52 (41.9%):	Strongly Agree
0 (0.0%):	Not Applicable
14:	[No Response]

9. Required reading is useful.

4 (3.3%): Strongly Disagree
11 (8.9%): Disagree
24 (19.5%): Neither Agree nor Disagree
25 (20.3%): Agree
12 (9.8%): Strongly Agree
47 (38.2%): Not Applicable
15: [No Response]

10. This course is difficult relative to others.

3 (2.5%): Strongly Disagree
9 (7.5%): Disagree
27 (22.5%): Neither Agree nor Disagree
50 (41.7%): Agree
31 (25.8%): Strongly Agree
0 (0.0%): Not Applicable
18: [No Response]

11. Exams are representative of the course material.

5 (4.1%): Strongly Disagree
10 (8.2%): Disagree
8 (6.6%): Neither Agree nor Disagree
68 (55.7%): Agree
30 (24.6%): Strongly Agree
1 (0.8%): Not Applicable
16: [No Response]

12. Do you recommend this course overall?

112 (88.9%): Yes
14 (11.1%): No
12: [No Response]

13. Course CSE 158:

- Interesting class but very difficult
- Not sure what the purpose of this course is.
- Programming assignments tough and demanding, but really stimulating
- Very practical class
- Interesting and challenging.
- It is a HARD class to follow. Professor speaks really fast and doesn't explain very well, so you really have to understand the material on your own. Assignments to him are easy, but are actually pretty hard. I came to like the competition and open-ended assignment, so hope you do too
- Making the grades based on each other's performance was such a weird decision...Just made the class so much more stressful than it had to be. A lot of us in the class had different

experiences when it comes to machine learning and recommender systems, so putting people with little experience in a competition with people with a lot of experience was such a letdown.

Like, why would you ever think that this is remotely a good idea? Beating standard baselines and expectations is fine, having a cutthroat mentality between students is not. Really hope this changes, because the class was amazing otherwise.

Also some of the tutors were very condensing/hostile on Piazza. Hope to see this addressed.

- Data mining not really web mining
- Great course
- The idea of the course, data mining and analysis, is great overall. It covers useful topics for students wanting to enter the data science field.
- A very interesting and worthwhile course with a good professor.
- The class overall doesn't structure very well. People have to compete with each to get a higher score because you not only have to beat the professor's solution, but also earn points based on the ranking. I hate that because it took so much time to just increase your result by several percent, and it makes the class harder than I would expect. It doesn't specify you have to know python before you go to class. If you don't know python, then you have to spend much more time on learning it first. Hopefully, the class can be better structured, and as long as you have to solution right, you can earn points, especially you have to compete with graduate students and python pros, or you can add python as prerequisite.
- This was a very fun course. I feel like I learned a lot, and it has changed the way I see problems. Instead of "I wonder if machine learning could be applied to this problem?" I can say "a simple way to apply machine learning to this would be ____"
- I felt that the first four weeks of the course was slow. Similar to all machine learning courses taught here at UCSD, they review the same material on fundamentals of data science/machine learning. This includes topics such as overfitting and underfitting, supervised vs unsupervised learning, etc. At UCSD, it would be nice to have a fundamentals of machine learning course so that classes such as CSE 158 can dive directly into what it is supposed to be: Recommender Systems and Data Mining.
- More assignments on how formulas are derived. It's better to know how the function works beforehand
- Very interesting class with relevant projects.
- Difficult if you have not had any machine learning/data mining experience
Lectures can be rough and confusing
Assignments can be very challenging
- may take attendance in future quarter
- Quite difficult towards the second half of the quarter. Had a hard time since this was my first artificial intelligence course.
- Generally interesting course that covers a lot of practical AI approaches. Could be better if it included random forests and/or neural networks.
- The material itself is incredibly engaging and interesting. I would definitely recommend it to anyone who is interested in data mining. We are clearly shown how we can use the topics we learned in the course to any data set that we find interesting, or any trends we'd like to study.

- This course is a good introduction to applied statistical analysis and machine learning. It is difficult to come away with a rigorous understanding of the material, though, and the content mostly boils down to some intuition about statistical learning methods, and how to use pandas/scikit-learn (or Prof. McAuley's subpar pure-Python algorithm implementations).
- A great introduction to machine learning algorithms for recommender systems
- I liked this course a lot. I would have liked to covered fewer topics more deeply, rather than more topics more broadly.
- Very interesting course on what is essentially machine learning for recommender systems. Can be somewhat time consuming. The final assignment is very fun and interesting though, being allowed to choose any dataset from wherever we want and doing some analysis on it. Please do try and teach more machine learning models and methods though. I felt that spending only the first 3-4 weeks on them barely just scratched the surface of all the different learning techniques.
- Great course for an intro to machine learning. Assignments promote learning python relatively quickly. loved the course overall.
- It seems like an overview/survey of tools and techniques used in machine learning.
- It's an alright course. I like that a lot of the topics are explained with relatable data (such as social media datasets), and some of the things are simple and easy to understand, but there also is a lot of math theory behind it that is more complex and I feel like I don't really have a grasp on that stuff.
- interesting classes and interesting materials. :)
- Very rewarding class. This course makes me rethink my career path. Strongly recommended
- CSE 158 overall is a good introduction to machine learning that covered useful and interesting topics. I think that there were some concepts that were introduced in lecture that weren't as solidified since they were covered relatively quickly or we didn't get a chance to apply them in the homework or assignments. The topics at the end of the course seemed interesting but since we weren't evaluated on them, they wasn't much incentive for students to attend lecture anymore.
- I like the idea of this course, but dislike its implementation and structure. The first few weeks have a significant overlap with CSE 151, whereas the remainder is extremely topical, but the assignments and tests are heavily biased towards those first weeks. This leaves me feeling like the remainder is just fluff and removes my motivation to attend the later classes.
- Interesting material with a ton of information to dissect. Will be new to most CS students.
- This class provides a good, foundational base for machine learning designs and algorithms, and then delves into the specific areas of recommender systems and data mining. Professor McAuley has a clear command over the material and works to make assignments and lectures enjoyable and interesting.
- This course is the kind of course that if you really want to learn something you will but if you don't care too much you will gain a little.

14. Exams/Quizzes/Papers:

- Exam somewhat fair - more difficult than expected

- Homeworks do not cover the non-CSE 151 material significantly. Also, all homeworks are programming only, whereas I think they could have benefited from some theoretical practice, especially on the newer topics. This especially holds for the midterm, which I feel was not connected to the homework at all.

There also was issues with assignment ordering where other homeworks were released after but were due earlier. I personally do homework in order of due date, so that left me with one week for each of the large assignments that were supposed to take two or more. I also generally dislike the open-ended nature of the large assignments, especially when I have a hard time making connections to the material covered. Competition and research reports are stressful =(At least make Assignment 2 due on finals week rather than week 10, or make Homework 4 due on week 8 rather than 9.

- pretty fair and representative
- Very open ended. Can be finished without much effort or attention. Grading is very lenient.
- please give more time and give lesser penalty to small mistakes for the exams. It was unfair since we got penalized a lot of our grade for small mistakes.
- The exams and assignments were challenging.
- There's only 1 exam that worth significantly on overall grade. I was not feeling well that day and performed worse than expected, and since there's only 1 exam, I couldn't redeem myself :(
- Tests are tough, and may not be representative of the course material (unless you studied specifically for what the tests is testing for)
- The midterm is overall good. Not too difficult also not too easy. Many critical thinkings
- Felt like the exams did NOT match material/level suggested by class. In other words, it was extremely difficult and long given the time we had to complete it.
- Exam is fairly difficult, but he has previous midterms to go over. Our midterm was actually harder than the past ones, so maybe study more?
- Exams relatively easy
- Midterm and assignments are entirely representative of course material.
- The homework and midterms partially covered the things we covered in class and partially covered the things we did not cover in class. I'm not sure whether it is because of the way the class was structured or because of the professor.
- exam was toooooo long. especially that evaluation metrics problem
- Final please. It stimulates me to come to class
- No final!
- The midterm was pretty fair, and the assignments (projects) were reasonably open-ended to encourage exploration. I was disappointed in the regular homework assignments, however, as many ask for specific values (e.g. accuracy, or computed features of the data sets) without giving any "sanity check" values. In most other classes with similar grading metrics, the instructor provides a "sanity check" value (e.g. on a subset of the data, or for some steps part-way into the algorithm/process) so that early/simple/trivial mistakes don't snowball. I think this is a simple change that would reduce the anxiety and noise which is always prevalent on Piazza.
- The one exam wasn't too hard, however, little mistakes tax heavily.

- Exams are fair but the exam preparation makes it seem easier than it actually is.
- A lot of assignments, no finals = good
- Kaggle was a great idea with some big perks but needs changes. It's too competitive, the complete lack of transparency rewards cheaters, and very limited availability of help if the accuracy scores aren't coming out as they should. This could be a very fun and positive learning experience but the implementation turned it into a stressful and frustrating experience for way too many students.

Midterm generally fair but lots of students felt the time constraint was too short.

Final project was a lot of fun and allowed for creative application of the most interesting concepts from the class. However, that's because I was fortunate to have a spark of inspiration for a dataset that would make for an interesting project. If I didn't have that inspiration it could have been a very unpleasant project. There weren't that many easily-available datasets online that met the criteria for the course so maybe there should be more recommendations for good sources.

The material towards the end of the course was interesting, but the problem with it was that we never had the chance to apply the knowledge. If we were to do just one of those topics like temporal models but actually learn how to implement them it would be much better. As it stands we saw a lot of research papers which were a bit over our heads and hard to internalize properly as a result.

- Was tougher than expected
- No final!!!
- 1 midterm no final. whoa. Although there are 2 assignments that each make up 25% of grade, which is slightly intimidating. Midterm was more difficult than expected and included almost all the material covered up to that point.
- I thought the midterm was pretty easy, but I didn't do as well as I thought.
- Midterm was very fair. Especially with old midterms online and the review session in class, it was easy to know what to study.
- The exam was a lot harder than previous years. There are no quizzes. We did have to write a final report for this class, but the assignment was so much fun that I didn't mind writing it at all, even though I usually hate writing.
- Midterm was much harder than anticipated, given our low scores
- Very fair Midterm and assignments/homeworks
- Exams are a bit tough
- The midterm was very fair. I thought the homeworks were useful and challenging. I also liked the assignments.

15. Reading [title(s) and comments]:

- Reading titles are optional.
- There is no reading except some other papers you can read. It's not required, and professor doesn't say if it's useful or not.

- Nothing was mandatory which was nice
- There weren't any readings
- I hope I can get more required reading material.
- Only one of the textbooks were relevant; the other was too dense to be useful.

INSTRUCTOR Julian McAuley

16. Instructor displays a proficient command of the material.

2 (1.6%):	Strongly Disagree
2 (1.6%):	Disagree
3 (2.5%):	Neither Agree nor Disagree
50 (41.0%):	Agree
65 (53.3%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

17. Instructor is well prepared for classes.

1 (0.8%):	Strongly Disagree
2 (1.6%):	Disagree
5 (4.1%):	Neither Agree nor Disagree
55 (45.1%):	Agree
59 (48.4%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

18. Instructor's speech is clear and audible.

2 (1.6%):	Strongly Disagree
2 (1.6%):	Disagree
8 (6.6%):	Neither Agree nor Disagree
52 (42.6%):	Agree
58 (47.5%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

19. Instructor explains the course material well.

4 (3.3%):	Strongly Disagree
13 (10.7%):	Disagree
13 (10.7%):	Neither Agree nor Disagree
50 (41.0%):	Agree
42 (34.4%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

20. Lectures hold your attention.

5 (4.1%):	Strongly Disagree
23 (18.9%):	Disagree
26 (21.3%):	Neither Agree nor Disagree
41 (33.6%):	Agree
27 (22.1%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

21. Instructor's lecture style facilitates note-taking.

6 (4.9%):	Strongly Disagree
21 (17.2%):	Disagree
32 (26.2%):	Neither Agree nor Disagree
39 (32.0%):	Agree
24 (19.7%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

22. Instructor shows concern for students' learning.

2 (1.6%):	Strongly Disagree
6 (4.9%):	Disagree
16 (13.1%):	Neither Agree nor Disagree
58 (47.5%):	Agree
39 (32.0%):	Strongly Agree
1 (0.8%):	Not Applicable
16:	[No Response]

23. Instructor promotes appropriate questions/discussion.

3 (2.5%):	Strongly Disagree
8 (6.7%):	Disagree
16 (13.3%):	Neither Agree nor Disagree
53 (44.2%):	Agree
37 (30.8%):	Strongly Agree
3 (2.5%):	Not Applicable
18:	[No Response]

24. Instructor is accessible outside of class.

1 (0.8%):	Strongly Disagree
3 (2.5%):	Disagree
10 (8.3%):	Neither Agree nor Disagree
51 (42.1%):	Agree
37 (30.6%):	Strongly Agree
19 (15.7%):	Not Applicable
17:	[No Response]

25. Instructor starts and finishes class on time.

1 (0.8%):	Strongly Disagree
2 (1.6%):	Disagree
3 (2.5%):	Neither Agree nor Disagree
62 (50.8%):	Agree
54 (44.3%):	Strongly Agree
0 (0.0%):	Not Applicable
16:	[No Response]

26. Instructor is effective in promoting academic integrity.

1 (0.8%):	Strongly Disagree
3 (2.5%):	Disagree
11 (9.0%):	Neither Agree nor Disagree
64 (52.5%):	Agree
41 (33.6%):	Strongly Agree
2 (1.6%):	Not Applicable
16:	[No Response]

27. The instructor practiced effective teaching strategies that acknowledged and valued differences among students, including differences of race and gender identity.

1 (0.8%):	Strongly Disagree
2 (1.7%):	Disagree
13 (10.8%):	Neither Agree nor Disagree
48 (40.0%):	Agree
44 (36.7%):	Strongly Agree
12 (10.0%):	Not Applicable
18:	[No Response]

28. Instructor Julian McAuley:

- Professor McAuley has a clear command over the material and works hard to ensure assignments and lectures are interesting and informative. With in-class proofs, he helps students to understand difficult concepts related to many ML designs/algorithms.
- Cool guy. Somewhat vague instructions but I suppose that is the nature of computer science. Yes, it facilitates learning. No, it's not the best way.
- Good tone of voice, explains clearly...just exams were too long given the time we had.
- He is a great teacher. But I think the content of his lecture is too much that he cannot explain all the math thoroughly, which makes the course less attractive. You can see it by the number of people who attend this class.
- Very strong professor who displays great domain knowledge. My only complaint is that his handwriting is sometimes illegible, which is inconvenient for reading slides after lecture.
- Do not explain much details for materials in the lecture, and the slides don't clarify the study goals. He assumes we know everything like advanced linear algebra, and python programming, so technically you need to learn all the stuff by yourself. Lecture is very less helpful, so many students don't show up in class except at exam.
- Very knowledgeable of the material he teaches but has difficulty engaging the class with his lectures. This is not his fault, it is due to the complex nature of certain topics of the course.

- He is good, but could be better.
- Please please improve your handwriting!
- Very smart instructor. Seemed very knowledgeable in this field of CS. Also found him included in the citations in many pieces of academic literature, which was very surprising and made me feel like I was being taught by the god emperor of machine learning.
- Excellent professor and very knowledgeable about subject
Good lecturing style and clear presentation
Only criticism is that he goes a little too fast through the more complicated parts of the course
- Professor McAuley is one of my favorite professors at UCSD. This course could have been absolutely horrible if taught in a traditional way, but he taught it in a way that was fascinating, applicable, and fun. His assignments were interesting and his real world examples were a great way to connect what we learned. The homework assignments were nothing like a typical programming assignment - they forced us to make the connection between lectures and real life studies.

I didn't go to class often since I don't like being on campus late, but I watched the podcasts, which are clear. 10/10 prof

- Good instructor and knows the material well
- I'm not a fan of his teaching style. Most of the times, he bombards us with really obscure math that less than a fourth of the class understands. While this all makes sense to him, a professor who has studied this topic for years, he fails to understand that most students are only seeing this for the first time and have no idea what is going on. The good side though is that he shows some concrete (and sometimes visual) examples of the concepts being applied.
- nice professor and taught things clear. cute British accent :)
love the way you said "data" lolll
- Professor McAuley is fantastic; he is a great professor, not only grasps the material very well himself but can also explain it very well. He does not hesitate to answer everyone questions. He also has a good sense of humor and keeps the attention of the class. Would definitely recommend, he is reasonable and approachable and prompt.
- According to TAs, he's more busy with research this quarter and was more engaged with the course the last time he taught it. That's too bad for us, then. Compared to CSE 151, he explained the overlapping material far less clearly.
- I have some differences of opinion with him, but I think he means well. He's a very nice professor who loves to talk about data mining, but it's unfortunate that students don't feel the same way about him. Most of the students stop coming to class after like third week and it's sad. He also speaks very fast without clear explanations so some of the material is kinda hard to grasp. Wish he could slow down
- A boring lecturer. It can be perceived that he knows much about the course material, but is not quite the most adept at conveying that information. Frequently "blanks" out and fails to complete "degenerate" solutions without a second try, leading to confusion later on. But he is the only one.
- Accent very well and office hour very accomodating
- He is very knowledgeable about the material and keeps the lectures engaging.

- Professor McAuley is a great lecturer. I enjoyed his humor throughout the quarter, and I felt he explained concepts clearly and concisely. His class was resplendent.
- He's good at teaching and fun to listen to. The world would be a better place if everyone had his accent.
- He's Thor's brother that can teach data mining
- Professor McAuley is a great lecturer. He shows strong command of the course material.
- Cool professor
- he talks too fast and goes through the material too fast.
- I really wish there was more incentive to go to class and hear the material in person as the class was extremely interesting, but since there wasn't a final I found it hard to any lecture past the midterm when I found myself doing something else more productive. I'm not suggesting a final is a solution to this, or at least one that students will like, but maybe some kind of other incentive such as more homework assignments that are shorter and tied to the topic for each week. Something like that this would encourage me to go to class as I would know I'm learning about something that would be applicable at that current time.
- A very nice and knowledgeable professor. He is very reasonable with the grading and assignments throughout the entire class
- As a lecturer: McAuley delivers organized, thought-out lectures, although the handwritten parts of lecture can make understanding and notetaking difficult. Overall I found it difficult to keep discipline in attending lecture in person, as they provided little value over watching the podcasts at higher speeds.

As an assignment designer: McAuley could stand to be a little more accommodating in homework assignments. For example, the inclusion of "sanity check" partial answers (e.g. on a subset of the full data set, or on midway steps in an algorithm/process) would be invaluable in helping students catch minor errors early in the process. (These assignments are especially unforgiving in this respect, since training models often requires several minutes on consumer hardware.)

Another aspect of homework with which I was quite disappointed, was the continued use of the Python `eval()` function in sample code. Not only is this inherently insecure, but the sample code even downloads the `eval'd` string from his website (no HTTPS at the time of this writing) without any form of verification/checksum! This are blatantly poor security practices, and when another student pointed these security issues out on Piazza, McAuley was unwilling to mitigate the concerns in any meaningful way. Any student in the library (or other popular study location) could have trivially run malicious code on others' computers by replacing the actual content with arbitrary code (using a MITM proxy or similar).

As a professor in office hours. McAuley is great at explaining the course content in greater detail and rigor that during lecture. Also, he publishes a livestream of his office on his UCSD site; I once requested (by e-mail) a smile for the camera, which he granted without delay. I appreciate this extent of facilitating students' learning.

- Very laid-back in his style of teaching and cares more about learning the material than getting in certain work done. I like that he's lenient with that. He's accommodating to people who have extreme circumstances but is truthful about what he expects and what he doesn't want to happen (like people abusing leniency in grading or anything similar). Unlike many other teachers, he's not super strict on turn-in dates, like if it were late by ~5 minutes that is okay.
- cool

- Well spoken, clear, and confident.
Move a little too quickly through mathematical derivations.
W.r.t. organizing his tutors/TAs: I think that students need a lot more feedback about what they could have done better on assignments. Merely knowing that your answer doesn't match the rubric isn't very enlightening.

29. Do you recommend this professor overall?

115 (90.6%): Yes
12 (9.4%): No
11: [No Response]

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.