Instructor: **Venkatesaramani, Rajagopal** Subject: **CS**

Catalog & Section: **5100 03** Course ID: **21186**

Objectives

Enrollment: **104** Responses Incl Declines: **51**

Declines: 1

Instructor Related Questions: Rajagopal Venkatesaramani (80 comments)

Q: What were the strengths of this course and/or this instructor?

- 1 Prof Raj is a hands-on person. He gives his best to bring a holistic experience while presenting the topic. He would provide reading papers and coding assignments to keep students covered across the breadths and depths of the subject.
- 2 The strengths of this course is that, there was room to explore, and challenge oneself, Although not by raising the base requirement. I feel This aspect made the course rewarding and fruitful for all students.

The strengths of the instructor, was his down to earth nature, and how approachable he was. His depth of knowledge and emphasis on this depth really ensured that all students had a solid grasp on all concepts.

- 3 Covering the wide range of domains under Artificial Intelligence, and giving assignments that helped us understand and implement these was a great source of learning.
- 4 The instructor approaches the topics with a gusto that reflects passion.
 - He has amazingly curated presentations and slides.
 - He includes a multitude of hands-on examples which makes his classes even more interesting.
 - His assignments have written and coding submissions which furthermore cement the foundations.
 - The instructor by himself is extremely congenial and approachable.
- 5 Very knowledgeable and interactive and supportive!
- 6 The class was really inclusive and interactive.
- 7 Prof. Venkat has a youthful energy when he teaches. He has his ideas and concepts clear in his head, and makes the lectures interactive, no doubt. As he gains more years of experience, I'm sure he will become one of the best Al professors at Northeastern!
- 8 The class was always fun with good presentation and demos
- 9 The professor was very enthusiastic about the class
- 10 1. Very active and responsive. Instructor responds to queries on Campuswire really quickly. Also provides solutions to all technical problems that may arise during assignments.
 - 2. Very friendly and open to discussions.
 - 3. Prof. has lot of demos which are great for some topics.
 - 4. Assignments are very light and manageable
- 11 He really loves his students to bits. I would message him at 3 am and he would be there to help. I've never felt like I was alone in this course and it was truly one of the best interactive experiences I've had at Northeastern. He teaches just enough to engage the students attention makes them want to learn and then it is up to the student to put in the effort to cover the content.
- 12 I think the instructor's affinity for AI shows and makes it more engaging
- 13 Amazing teacher
- 14 The Teacher is very knowledgable and can explain the conepts very well as well as simplifying the complicated concepts
- 15 V enthusiastic and easy going. V approachable
- 16 This was his first time teaching in Northeastern and perhaps a proper graduate classroom and he did a good job. The assignments were similar to what he taught in class but anyone interested in learning Al and has a decent programming background can navigate through the assignments and classes fairly easily.
- 17 The professor had very good understanding of the topics he was teaching and he taught them in a way that made them easier to understand.
- 18 The instructor is really good and try to teach students useful knowledge.
- 19 1. Teaching style was something I enjoyed. It was more catered to our will to learn.
 - 2. Always on time and ensured that the classes were not boring with a lot of demonstrations.
 - 3. Ensured that we explored new possibilities and made sure that we learnt the concepts to solve the assignments.
- 20 The assignments set by the professor were based on the topics taught in the class. This made the course more enjoyable as I would understand the concepts and apply them in the assignments. Professor would take time to answer the questions asked and if he did not have the answer, he would give the answer and explanation in the following class.
- 21 It was a big class with over 100 students, sometimes it's hard to follow when professor speaks without a microphone on.
- 22 He has great presentation skills and also he is very knowledgeable
- 23 The lecture content would give a great overview of the concepts and build foundation for self-paced learning outside of class.
- 24 Converses with students like a peer and helps clarify any doubts and/or help with homework readily.
- 25 Making the course very interesting by visually and technically strong presentations.
 - Up to date teaching and content covered in class rather than age old, out of touch with reality syllabus.
 - The assignments in this course were the very best!
- 26 Professor has good knowledge about the field but wasn't prepared with the course material in most of the classes. Assignments were interesting, learned a lot about reinforcement learning through them.
- 27 The instructor was clear in communicating the concepts and ideas. The slides were well prepared.
- $28\,$ $\,$ I think he has a lot of experience making the lecture as engaging as possible.
- 29 The professor loves the subject so it reflected on how he communicated the material.

Q: What could the instructor do to make this course better?

- 1 Given that this is his first time teaching, Prof. Raj is doing great. He could revisit his slides to add more information and structure his lecture better.
- 2 I believe the material could have been more structured, but given that the faculty was new, and that this was his first time taking this course. I believe he went above and beyond what I would expect a new professor would be able to do.
- 3 More informative slides and notes
 - I personally like video simulations and the working behind algorithms and models would appreciate more of them as they make the class extremely intuitive.
- 4 Sometimes the professor goes a little fast, especially when it is related to math concepts but he takes all questions and answers them. However could pace down a little sometimes
- 5 Make the content and the lectures bit more detailed and organized.
- 6 Discuss the papers he included under reading for the next lecture in class. Have more hands-on coding sessions in class. AND INCREASE THE CHARACTER LIMIT TO MORE THAN 140 IN HIS QUIZZES!!!
- 7 more TAs for better doubt clearing when in need.
- 8 In the early part of the semester you can follow the PowerPoint and learn a lot, but later on it's not so easy to follow
- 9 1. There needs to be (a lot) more study material, readings and notes. PPTs are not nearly enough; they cannot serve as a resource for self study, they merely delineate the topics covered in the lecture.
 - 2. The Teaching Assisstants seem to change their Office Hours timings every other day.
 - 3. Have an unofficial prerequisite of basic probability and linear algebra (Maybe take the first two classes to share "to the point", high quality resources for these topics and keep a graded assignment to test these topics) since without these, it is impossible to grasp anything from MDPs and Machine learning.
- 10 I feel like more informative slides would definitely help more but the Professor also didn't have much time to prepare for this course and is definitely an iterative process that will only get better and better.
- 11 Explain the concepts in more detail and make the teaching more engaging.
- 12 I found myself taking in a lot of technical information like formulas or how-tos (like how to get loss or something) at once and often leaving class forgetting most of it. I'm not sure if this is the fault of the instructor or me (probably me).

Firstly, I think for parts where you write/draw instead of having slides, having uploaded notes would be great to look back over.

Secondly, why I think the fault is on me is because I'm not an AI student, and I took this class to try it, and I found that I don't really like it, so it was easy for me to lose interest in class when so much was thrown at me which lead to the aforementioned issue.

Regardless though, class was enjoyable

- 13 Typed up notes to review after lecture
- 14 I know this was the first year teaching but I would have loved to have more resources and examples on current topics as well as supportive topics that are prerequesets as reminders to bring those behind up to speed.
- 15 Provide more information/background/explanations in the slides for better review of concepts.
- 16 While the lectures were informative, I think there are things he should have been better prepared for. Especially the math-y areas of the course where you would need to pay the most attention.
- 17 Have more readings from texxtbooks for the class as just the notes and slides were not enough sometimes.
- 18 I really think the set of quiz is so unreasonable, if you answer wrong one question, you can only get 80% marks. It may be reasonable to set 5 questions for a 5 points quiz. Now, you can only get A(100%), otherwise, B(80%), which I think is not fair.

The homework tries to include too many things, sometimes the PDF is not same as the CODE description and needs to use Campuswire to correct them, the details are sometimes not so clear related to homework, I have to revise my homework several times according to the update in Campuswire.

- 19 I hope the toughness of Assignment 2 was a bit less.
- 20 Maybe the lectures could be recorded so they can be revisited later.

Better in class resources could be used as the board was not visible properly in the class and sometimes it was difficult to hear him if the mic was not working. TAs should be better prepared to answer questions related to the assignment as I found many times they weren't able to clear doubts easily

- 21 Improve the expectations of the assignment. Sometimes I wasn't able to understand what was being asked of me until I spoke to the professor.
- 22 For me personally, i felt that during assignment 3 which required heavy usage of pytorch, as I had not used the library before and was not aligned with the terminologies, it would have been very helpful if professor had taken extra classes or shared some exercises so that I could have tackled the assignment better. It does not make sense to teach the fundamentals in the regular class but since I never got the opportunity to use these libraries in my undergraduate program or while I was working, doing this would have been helpful for me.
- 23 1. Using a microphone if it's a big class.
- 24 He could've written some code during the class to demonstrate the concepts
- 25 The instructor uses a color scheme for the slides that is friendly for color blindness issues. However, we had plenty of lectures where slides were projected on the chalk board instead of the projector screen. Since the colors of the chalk board and the projector screen is totally opposite, the color blind friendly color scheme was not as viewer friendly (in terms of readability) against the dark background chalkboard.
- 26 Incredible instructor and course. No changes.
- 27 Added some more content into the slides? At least for later reference. Sometimes it's hard to just look at the material provided for that class to recollect what was discussed during the class. The notes provided is not helpful enough.
- 28 Take a few months off, prepare the course material and then start teaching again.
- 29 The high-level discussions on NLP and computer vision were interesting but I could not really follow the technical aspects and didn't feel like I have learnt much.
- 30 I think a recording would really help students reviewing the course material. I understand that his lecture slides are supposed to be vague to make it easier to read/see, but it does not help a lot when it comes to reviewing using it. Homework can be phrased a bit clearer with what direction he wants it to be, and there should be some scale that student can use to determine how correct they are with their solution, without having to involve the TA or the professor, and so far, that is only available for assignment 1. The last homework can use a bit of an extension too, since the final project is around the corner by that point, and it's hard to juggle both at the same time.
- 31 Recorded lectures or more online content to refer to outside of class hours.

Q: Please expand on the instructor's strengths and/or areas for improvement in facilitating inclusive learning.

- 1 His style of teaching is fresh and can pretty confidently answer most questions that arise, but simultaneously acknowledges when he doesn't know something.
- 2 Aread for improvements could be the time management as most of the times the material prepared was not sufficient for the whole class. And as for strengths I believe this being his first class, he taught it keeping in mind how the average students wants to learn and that would be really helpful for other batches if continued going forward.

Q: Please expand on the instructor's strengths and/or areas for improvement in facilitating inclusive learning.

- 3 Anyway, the Rajagopal is a good teacher trying to help students! If he can improve the set of quiz and homework, it will be better!
- 4 Strengths: The reading materials are a very good way of expanding my knowledge.

Areas of Improvement: People who have no idea of AI need to do a lot of post-lecture studies to keep up. This could be brought down to a minimum (glace of the lecture notes/basic revision). One way that I believe would work is to plan the way to present the material.

- 5 I know for a fact that inclusiveness is one of his core teaching principles, and i noticed that he strives for it. I don't think its possible to facilitate a better learning environment.
- 6 1. Very enthusiastic
 - 2. Always willing to help
 - 3. Showed a lot of demos and kept the class interesting
 - 4. The choice of topics were very interesting.

What can be improved is the clarity regarding what is expected from the assignment.

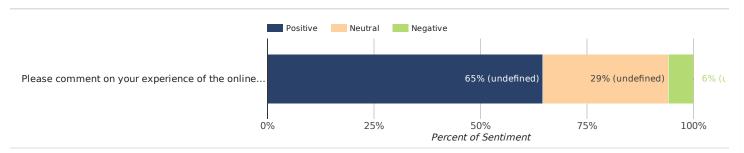
- 7 The professor is extremely enthusiastic, and I have no doubt he'll get better with time and in turn make the classes mor intuitive and interesting.
- 8 Knowledgeable Friendly Interactive
- 9 Instructor has good knowledge of the subject and is a good teacher who promotes interactions in class.
- 10 As mentioned above, if professor took recitation sessions or something of that kind and gave exercises to practise, it would be very useful for a student to become better in the course.
- 11 He was pretty good for someone who taught his first semester as an undergrad and grad professor. He could work on making the class a little more interactive, and maybe include labs/recitations from the next semester onwards!
- 12 The instructor is very friendly, open to answering questions and discussions. They are very approachable and are very active on Campuswire which is really helpful from an assignments point of view.

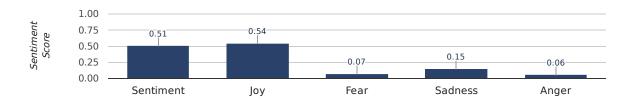
The instructor must provide more study material, ensure TAs adhere to their Office Hours timings and have more rigidity and structure in the overall course.

- 13 Intuitive way of teaching. Very well-prepared slides with carefully picked-out examples.
- 14 I have autism and have a hard time learning and picking up content in a lot of my classes but he made the classroom and extremely inclusive environment for all. You could ask questions any time and he never displayed any form of frustration or disapproval. I can't give higher praise for a Khoury Processor at Northeastern. He definitely is one of the highlights of my college experience.
- 15 Really enjoyed the teaching style and keeping the class interesting.
 - Probably for the same one or two students asking redundant questions, it could be helpful for all the other students to tell them to take the discussion after the class?
- 16 Professor is knowledgeable but the course lacked structure, we're paying a lot of money for each course, it's reasonable to expect the instructor to have the course material ready and have a clear plan for each lecture. I regret taking this course, but didn't have an option as it's a core course for my program. I suggest the professor to take a semester off to thoroughly prepare lectures and then resume teaching the course.
- 17 N/A
- 18 I also was very confused at how to adapt the concepts into practice (code) and would have benifited from more examples but was greatful for the extra time the proffessor took in his office hours which counteracted this drawback for me.
- 19 V energetic and welcoming to questions/doubts and feedback.
- 20 N/A

Questions to Assess Students' Online Experience (17 comments)

Q: Please comment on your experience of the online course environment in the open-ended text box.





1 The online enviornment for the course was very well organized on the professors website. $\star\star\star\star$

Q: Please comment on your experience of the online course environment in the open-ended text box. 2 Excellent course to start off learning about AI. The professor was very helpful and highly enthusiastic about teaching. 3 average★★★☆☆ Amazing course. Great learning thoughout ★★★★ Professor would interact regularly with students and solve the doubts posted online. Easily approachable and answers questions effectively \star N/A★★★☆☆ 6 Online experience was mostly for doubts clarifications, office hours, and assignment related questions. It was easy to follow and keep track of questions being asked. *** *** Campuswire, the forum for class discussions has been really helpful, with the Professor actively responding to all queries posted by students. This has been extremely positive and comforting. There are however, not enough course materials, resources and lecture notes. The PPTs that are shared serve more as a tool to provide directions to the lectures in the classroom while the professor is teaching, but they do very little(nothing) as a learning resource. Some lecture notes would be really helpful for those trying to revise. \star 9 Helpful and Informative (especially the papers posted for reading). ★★★★ 10 This is mostly an in-person course and you should be prepared to attend all lectures because the Professor is truly awesome. 🛨 🖈 🛨 🖈 11 There was no online class made available for this course. Sometimes due to unavoidable circumstances one can miss a lecture. At least a recording of the class should me made available to students who missed the class. 🛨 🖈 🜣 🜣 12 Campuswire was helpful★★★★★ 13 The campus wire interactions were good. ★★★★ 14 N/A★★★☆☆ 15 campuswire and course website were used effectively. slides were beautiful! $\bigstar \bigstar \bigstar \bigstar$ 16 no online option★★★☆☆ Student Self-Assessment of their Effort to Achieve Course Outcomes (23 comments) Q: What I could have done to make this course better for myself. Sometimes I need to learn more after class to handle the knowledge Nothing, this course was beyond my expectations. 2 A stronger understanding of math would've made this course easier for me. - Could have spent more time on foundational books. 4 5 teach interestingly? 6 Could've read all the paper readings better Had given more time to learn about topics in AI, apart from what were taught in class to get a deeper understanding of the concepts. I could have put more time in understanding the fundamentals of libraries used which could have made the assignments and projects easier I could've spent more time on the subject and get a better understanding of the concepts 10 Practiced Python programming more, as concepts were easily understood. But not being good at coding can really cause a person to get stuck. 11 read more textbook Better time management on my part to finish assignments well ahead of time. I will try and review the optional readings after the semester 13 1) Read thoroughly and in depth about everything the professor teaches in class from eternal sources and the internet and make notes after reading so I have study material for later on. 2) Have realistic expectations about the course outcomes; It is only going to introduce me to various AI topics, not so much "teach" me about them. If I want to learn about them, I need to do my own study 14 None 15 I loved this class and I tried my absolute best. 16 Should have enrolled for the class earlier 17 Probably go back and go over what I didn't fully understand from class 18 Could have made myself familiar with numpy and matplotlib 19 I could've read more paper/article related to it to see the problem clearer and as preparation for the homework. 20 Started the assignments early:) 21 Learned more of the background to get caught up 22 Started homework earlier 23 N/A