

Instructor: **Hand, Paul**
Subject: **CS**
Catalog & Section: **7150 01**
Course ID: **37338**
Objectives:

Enrollment: **46**
Responses Incl Declines: **37**
Declines: **0**

Instructor Related Questions: Paul Hand (49 comments)

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

- 1 Paul is very nice and clearly is an expert in deep learning, which showed in his lectures and discussion.
- 2

1. The instructors ability to convey the subject matter in an understandable way.

2. Strong grasp on the mathematical foundation.

3. Calm demeanor.
- 3 Great at teaching in class, created high quality youtube videos, assigned very thoughtful questions for our readings, just a nice dude in general and clearly intellectually curious.
- 4 Paul clearly cares about his student's learning outcomes. The class is not structured to reward "obey rules" but "do you really understand". Also appreciate how he breaks down complex or unclear things in the paper we read and encourages critical thinking.
- 5 Professor is very knowledgeable in the topic and is good at picking out good papers which would help the students learn the material best. Professor also pushes for critical thinking in regards to those papers.
- 6 Paul explains ideas very clearly, and has a very intuitive way of explaining some of the more abstract mathematical concepts
- 7

Paul Hand is undoubtedly the best professor I have ever studied in Northeastern.

His way of explaining things is very practical and clear.

He was very humble and encouraged us to ask as many doubts as possible and this created a very good learning experience.

He is a master at his craft.
- 8

Paul had an unconventional teaching methodology that proved to be highly effective. I am not sure if he made these choices primarily due to the remote learning environment, but I could see them being useful in a real classroom too and would recommend he continues them.

The course mainly centered around weekly written questions (completed in groups of 3) about recent papers in the field, which were then openly discussed during the lecture that week. These in-class conversations really resolved any misconceptions about the paper and helped solidified my understanding of the topic. As a result, I felt quite up-to-date with the deep learning literature by the end of the course, which has already been helpful for my graduate research.

Importantly, the questions had two deadlines: one before lecture each week (ungraded), followed by another 48 hours later (to revise answers). This was a game changer; it meant that the questions didn't have to be 100% correct the first time, completely alleviating the initial pressure of getting a good grade when reading the paper. This allowed me to really focus on the content of the paper itself and maximize my learning. The class time could then be used to clarify any remaining misunderstandings (and therefore get a good grade for the second deadline). Furthermore, this two-deadline structure ensured that everyone in the class had a shared context for that week's discussion, leading to more fruitful conversations and questions.

For these reasons, I felt that I gained a lot from taking this course, while also having my performance evaluated fairly. I really enjoyed having Paul as an instructor.
- 9 Covers wide range of topics in field of deep learning.
- 10 professor hand puts a lot of effort in creating the material and on the class. thats why the class was engaging and all the key areas and ideas are well covered.
- 11 The instructor was really good and came prepared for lectures and made every effort to make it an interactive session.
- 12

Instructor had full knowledge of course.

Structured the course well. A lot of work but prepares us for real life challenges.
- 13 The course is very well designed and its really very interactive
- 14 Dr. Hand was an exceptional instructor. He made very challenging and complicated concept easy to understand by simplifying them step by step. He managed class time and discussions very effectively and encouraged students into class participation.
- 15 I believe the course structure planned by Paul was amazing and comprehensive. His way of explaining things was surprisingly efficient.
- 16 Prof. Hand is very knowledgeable and lectures well. One of the better classes i have taken in college. Good subjects selected. Deep learning is active research so hard to teach but be did it well
- 17 Great organization of course syllabus.
- 18 Inverted learning style, in-depth review of lecture and papers assigned for reading.
- 19 The instructor is good at challenging us and teaching us critical thinking. The materials he chose and the way he taught were unique.
- 20 Paul really knows his stuff, and he usually makes difficult topics easy to understand.
- 21

The course was very well organized. The professor encouraged students to participate in a very good way and created enthusiasm in students to be well prepared before the class which helped us to grasp the things better. The assignments were intellectually challenging and helped us to understand the implementation of the papers we discussed during the class.

We need more professors like Paul Hand. Truly an asset to the Northeastern Community! :)

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

- 1 The participation grade component is unclear; we were told attendance was the only metric for participation but many of us have received penalties despite having perfect attendance.
- 2 Sometimes in-class participation, especially in a online setting can be distracting. It would help if the discussion methodology could be adjusted to facilitate open discussion while staying on point.
- 3 Make the homeworks harder, either in terms of theoretical rigor or in terms of forcing us to program more. Maybe these harder assignments could be optional for motivated students?
- 4 I think this class is already great! I think when it's not remote, it will be more fun.
- 5 Perhaps by being a bit more timely on the logistics side of things (such as posting gradescope submission pages, but this might be a TA thing).
- 6 While I understand the appeal of a discussion-based classroom, I don't think it was really appropriate for online settings. Additionally, I think we would have benefitted more by reserving feedback to our discussion questions in written form, and leaving lecture time for the instructor to teach the concepts (much like a traditional lecture scheme)

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

- 7
- Solutions to HW for analytical reasoning can be provided, because sometimes the marks are deducted but we still do not know what is the correct answer or the correct way to present the facts.
- 8
- Provide the expectations for answers to homework questions.
- 9
- perhaps some more real world examples and implementations along with theory will help students cement the understanding better, it is difficult to do this because of the volume of the paper to be read per week, so some example notebook etc will be helpful from TA etc
- 10
- Paul is one of the best faculty at Khoury
- 11
- My only disappointment with this course was both class content and assignments were around image processing and we only had one NLP related lecture. He made this clear at the beginning of the semester and the weekly syllabus was giving the topics. However, I could take more from the course if he devoted more lectures on deep learning for NLP.
- 12
- I guess more office hours could be nice. I already came to the course with deep learning knowledge so the homework's didn't feel particularly challenging to me but they definitely helped me learn further
- 13
- Re-structure syllabus topics for improved learning flow.
- 14
- Maybe cover a little bit more theoretical materials if there are deep learning newbies? I have the basic knowledge of CNNs and I feel like most of the students in class are familiar with neural networks so it wasn't hard for us to follow what the instructor taught in class. However, I would image a newbie might have had difficulties catching up.
- 15
- Cap it at a smaller number of students if the structure stays the same with paper discussions.
- 16
- To re-consider the depth of the course content: The content does not balance the theory and application.
- 17
- Can't think of any!

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

- 1
- Nice guy, very inclusive environment.
- 2
- Professor facilitated critical thinking by opening our learning material to discussion amongst the class. Not everything in those papers were perfect. These points were scrutinized and discussed in the class.
- 3
- Strengths: Style of teaching
Area(s) of improvement: More focus on foundational topics for the course, extra topics/video assignments each week explaining the underlying topics used.
- 4
- Explains things with utmost clarity.
He has a way of building up things from easy to difficult, so that one gets a firm grip over the complicated topics.
- 5
- I like how the instructor covers a lot of different areas/aspects of neural network and encourage us to challenge what's presented in the papers we read. I also like how the homework consisted both reading and actual code/training networks.
- 6
- strength would be a good intuition of what is important and helping students understand that in engaging group like environment with a open discussion. this was a unique experience altogether so hard to compare and suggest improvement, perhaps the lecture videos on youtube can use some visualization to aid understanding, because i am very visual learner.
- 7
- Paul is pretty good at still making everyone participate, even given the large number of students.
- 8
- Excellent faculty for deep learning
- 9
- I loved that Prof. grouped us for assignments so we could learn from each other and had a chance to discuss papers prior to class.
- 10
- The professor is knowledgable and knows what he is teaching. He encourages class participation and respects students' opinions and corrects the mistakes in a very respectable way. He is always well prepared for the class. And always creates an environment where students involve themselves in the discussion.
- 11
- I liked the discussion environment

Questions to Assess Students' Online Experience (15 comments)

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

- 1
- Paul encouraged participation from everyone.
- 2
- The course was structured in a way that encouraged collaboration, which was a great positive.
The course content was also fitting.
- 3
- Best course format I've had online or in person. Youtube lectures every week to watch before class and then class is in-depth discussion of those lectures. Other days we read papers before class and discuss. Very well thought out and well done.
- 4
- Amazing! I learned so much in this class, and read so many papers that helped me have a deeper understanding of deep learning.
- 5
- Professor took a flipped-classroom-based approach to online teaching and it was very effective in facilitating discussion. I felt quite involved in class despite not being in person.
- 6
- I think the discussion format doesn't really work in an online setting, at least not as well as it would've in an in-person setting. Perhaps adapting a more lecture-centric teaching method would've been more appropriate for distance learning
- 7
- I had a very good online experience. I was able to ask doubts in class and recorded videos of the class were made available for future reference.
- 8
- online experience was good, the professor was making online notes which was very helpful, drawing good analogies and deriving the equations
- 9
- The professor was really good
- 10
- Amazing teacher. Amazing Experience.
- 11
- Really Good
- 12
- Professor Hand provided a discussion-focused online learning environment which helped to engage with the material and gain a better experience from online learning
- 13
- Fantastic.
- 14
- Overall, the class was organized well. It was a bit too big for paper discussions, however.
- 15
- It was great!

Student Self-Assessment of their Effort to Achieve Course Outcomes (14 comments)

Q: What I could have done to make this course better for myself.

- 1 Work harder on assignments, know pytorch better.
- 2 Spend more time in preparation before the class.
- 3 Not much I got a lot out of it
- 4 I think the professor is already doing a great job! Group work sucks, but it's because of remote and well, group work depends on luck.
- 5 Reading papers and watching lectures earlier so that I could have more time to absorb the information.
- 6 There were certain papers that I probably should've read in more depth
- 7 I made the best use of online classes.
- 8 this course was good as id, perhaps more implementation of the concepts in paper because ideas in head will dissipate easily and its not possible to incorporate all ideas in home work
- 9 Nothing. It was perfect
- 10 In class version of the course
- 11 Given some more time to implementing stuff other than the assignments.
- 12 Studied more on the background mathematics and statistics.
- 13 Had more discussions about the papers before class.
- 14 dedicate little more time towards the end of the course