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Graduate Course Evaluation for Pengtao Xie Department of Electrical and Computer Engineering

ECE 285 - Spec Topic/Signal&Imag/Robotic Section ID 65901 Section Number B00 Winter 2022

Number of Evaluations Submitted: 47 Number of Students Enrolled: 51

1. What is your reason for taking this class?

4 (8.9%): Core Course Requirement 8 (17.8%): Subject Area Requirement

17 (37.8%): Elective 16 (35.6%): Interest

2: [No Response]

2. The Instructor was clear about course expectations.

33 (73.3%): Strongly Agree

12 (26.7%): Agree

0 (0.0%): Neither Agree Nor Disagree

0 (0.0%): Disagree

0 (0.0%): Strongly Disagree 2: [No Response]

3. The Instructor was well-prepared for class.

34 (77.3%): Strongly Agree

9 (20.5%): Agree

1 (2.3%): Neither Agree Nor Disagree

0 (0.0%): Disagree

0 (0.0%): Strongly Disagree 3: [No Response] 4. The Instructor organized class activities in a way that promoted learning.

28 (63.6%): Strongly Agree

8 (18.2%): Agree

8 (18.2%): Neither Agree Nor Disagree

0 (0.0%): Disagree

0 (0.0%): Strongly Disagree 3: [No Response]

5. The Instructor promoted and encouraged questions and discussion.

30 (68.2%): Strongly Agree

9 (20.5%): Agree

3 (6.8%): Neither Agree Nor Disagree

2 (4.5%): Disagree

0 (0.0%): Strongly Disagree 3: [No Response]

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

29 (65.9%): Strongly Agree

12 (27.3%): Agree

2 (4.5%): Neither Agree Nor Disagree

1 (2.3%): Disagree

0 (0.0%): Strongly Disagree
3: [No Response]

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

37 (84.1%): Strongly Agree

7 (15.9%): Agree

0 (0.0%): Neither Agree Nor Disagree

0 (0.0%): Disagree

0 (0.0%): Strongly Disagree 3: [No Response]

8. I would recommend this instructor overall.

33 (70.2%): Strongly Agree

12 (25.5%): Agree

2 (4.3%): Neither Agree Nor Disagree

0 (0.0%): Disagree

0 (0.0%): Strongly Disagree

9. What is your overall rating of the Instructor?

36 (76.6%): Excellent

9 (19.1%): Above Average

2 (4.3%): Average

0 (0.0%): Below Average

0 (0.0%): Poor

10. General comments about the Instructor's performance Please keep your comments constructive and professional, abiding by the Principles of Community

- Although the mathmatical analysis is complex, the instructor can use easy words to explain those cutting-edge models.
- Amazing for this course! It was great that he recapped after completion of some topics and patiently answered questions.
- · Best Instructor ever
- Excellent professor, love his every course.
- He is a really nice and knowledgeable professor
- Pengtao is very kind and helpful for our study of this course. And he is also very familiar with and good at lecturing the topics in deep generative models.
- Prof Pengtao is a great instructor who actually cares about the students. He was very
 accommodating during the hardships of the pandemic was very accessible to students even
 outside class hours and office hours
- Professor Xie has very nice personality and expert knowledge in his field.
- The course is a comprehensive introduction to all active fields in generative modeling.
- The professor showed that he cares a lot about the class and students this quarter by rescheduling lecture to meet everyone's times and being accessible on both Piazza and email. Also recording lectures so that they're always available.
- The style of teaching was slightly monotonous which is hindering attention retention and was slightly demotivating, but in a broader view it was great course.

11. I would recommend this course overall.

34 (72.3%): Strongly Agree

11 (23.4%): Agree

1 (2.1%): Neither Agree Nor Disagree

0 (0.0%): Disagree

1 (2.1%): Strongly Disagree

12. What is your overall rating of this course?

35 (74.5%): Excellent

10 (21.3%): Above Average

1 (2.1%): Average

0 (0.0%): Below Average

1 (2.1%): Poor

13. What were the particular strengths of this course?

- A nice overview of the popular field of generative model which is used in many state-of-arts ML works.
- Introductions for generative modeling.
- It gave us exposure to cutting edge techniques in the field of Deep Learning and the project was a great plus.
- Knowledgeable, helpful and patient.
- Project and lectures are perfect
- The materials are cut-edge technologies. We have learned a large number of generative models that could be useful for many things.
- This course has a lot of great content which is extremely helpful for students looking to get an overview of generative modelling.
- Very good and interesting topic in deep generative models. It is up-to-date in and relevant to both deep learning research and applications.
- Very new and recent course. Fun learning about these upcoming topics!
- You don't just learn theory, but how to implement as well

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

• Do conduct an exam (but with a lower weightage) as exams coerce learning of all concepts and not just the selective few that one is inclined towards.

It would be great if state-of-art techniques are like the GPT-3, CLIP, BERT, etc are also discussed briefly towards the end of the course.

- Homeworks were extremely simple. I believe that course assignments could improve if it has a good mixture of analytical and programming questions.
- I have these suggestions for the course
 - 1. The content in this course is really interesting and covers a lot. However, I feel I don't retain the things taught in class. I would suggest this course have multiple (short) Homework covering "all" the concepts taught as the current homework don't talk about half the stuff taught in class. For example, I don't remember anything about sampling, etc.
 - 2. This course also has some maths which is great, but as I said to fundamentally drill it I required some kind of assignment where I actually have an incentive to work out relative problems. This might make the course harder but I feel this is an important part of learning.

- I wish there was more focus on the real-world application for this class.
- It would be better if more intuition is provided for the introduction of models.
- Make some difficult concepts in PGM more understandable.
- Offline classes would have been more effective as compared to online classes.
- Pretty much great already
- Schedule of project due could be adjusted toward end of quarter, to allow more time to getting familiar to this research field.
- The last two homework is not very clear: we plan to implement VAE and GAN in the last two homework. However, due to the incompatibility between the GitHub repository and DSMLP, we will take a large amount of time in fixing and debugging the version of PyTorch, Tensorboard, Ignite in DSMLP.

15. What one concept did you take from this class that will shape your future?

- A comprehensive introduction for generative modeling
- bayes graph
- · Bayesian network
- Different types of generative models and PyTorch.
- GAN models
- Hand-on experience on generative models.
- I got to work with VAE and GANs (code them as well as understand them) which was so much fun! Would help me going ahead too! Very interesting area!
- I learned a lot more about pytorch
- I really enjoyed Pengtao's explanation of VAEs
- VAE and GAN

16. Do you have any other comments to add to your evaluation? Please keep your comments constructive and professional, abiding by the Principles of Community

No, I wish all the best to Pengtao and Sai

Please note that any responses or comments submitted by evaluators do not necessarily reflect the opinions of instructors, Electrical and Computer 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.