COMP9444
Neural Networks and Deep Learning

10a. Review

Assessment

Assessment will consist of:

Assignment 1	30%
Assignment 2	30%
Final Exam	40%

The Final Exam will be available on Moodle.

You will have 2 hours to complete the exam, within the window of 14:00 to 17:00 (Sydney time) on Friday 27 November.

The exam will be open-book.

You MUST complete the exam YOURSELF, without assistance from others, and without assisting others.

Examinable Topics

1c. Perceptrons
1d. Backpropagation
2a. Probability & Backprop Variations
3a. Hidden Unit Dynamics
3b. Convolutional Networks
4a. Image Processing
5a. Recurrent Networks
5b. Word Vectors
7a. Language Processing
7b. Reinforcement Learning
8a. Deep Reinforcement Learning
8b. Hopfield Networks & Bolzmann Machines
9a. Autoencoders
9b. Generative Adversarial Networks

Not Examinable

These topics are NOT examinable:

1b. Neuroanatomy
2b. PyTorch

Final Exam

Part A: (12 Marks)

Multiple Choice Questions (1 mark each)

Part B: (28 Marks)

Structured Questions involving a combination of:

selecting from multiple options, and/or entering numeric values

Part A Questions will be similar to the Quizzes.

Part B Questions will be similar to the Exercises.

Fractional Negative Marks for Incorrect Answers:

- −60% for Multiple Choice (Sub-)Question with Only Two Options
- −20% for Multiple Choice (Sub-)Question with Three or More Options
- No Negative Mark for Numerically Typed (Sub-)Question

Sample Exam

There is a Sample Exam available in Moodle.

Part A of the Sample Exam has only one Question.
(Part A of the real Final Exam will have 12 Questions.)

Part B of the Sample Exam is made up of Questions from the Exercises, converted to a suitable on-line format. (Part B of the real Final Exam will contain questions that are similar in style and scope, although the length, content and mark allocation of individual questions won't be exactly the same.)

Related Courses

- COMP3411/9414 Artificial Intelligence
- COMP9417 Machine Learning and Data Mining
- COMP4418 Knowledge Representation and Reasoning
- COMP3431 Robotic Software Architecture
- COMP9517 Machine Vision
- 4th Year Thesis topics

Possible 4th Year Projects

- combining autoencoders with GANs
- combining deep learning with associative memory
- language processing
- deep PCA, data analysis, generative models
- other topics in deep learning, evolution, games

UNSW myExperience Survey

Please remember to fill in the UNSW myExperience Survey.

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QUESTIONS?

Neural Networks and Deep Learning

GOOD LUCK!