Status	Beendet
Begonnen	Mittwoch, 12. Februar 2025, 14:22
Abgeschlossen	Mittwoch, 12. Februar 2025, 14:22
Dauer	8 Sekunden
Punkte	0,00/7,00
Bewertung	**0,00** von 10,00 (**0**%)

Frage 1

Nicht beantwortet

Erreichbare Punkte: 1,00

What is the main idea behind adversarial robustness?

Wählen Sie eine Antwort:

- a. To generalize the model to new tasks.
- b. To maximize accuracy on clean data.
- c. To make the model's training process efficient.
- d. To ensure that the model is more robust to real-world variations and distortions in the data.

Die Antwort ist falsch.

Die richtige Antwort ist:
To ensure that the model is more robust to real-world variations and distortions in the data.

Frage 2

Nicht beantwortet

Erreichbare Punkte: 1,00

What are adversarial examples?

Wählen Sie eine oder mehrere Antworten:

- [x] a. Images with intentionally perturbed pixels with the aim of deceiving the model.
- [ ] b. Images with incorrect labels.
- [ ] c. Images with missing labels.
- [x] d. Images with some blurring cause the model to make a false prediction.

Die Antwort ist falsch.

Die richtigen Antworten sind:
Images with intentionally perturbed pixels with the aim of deceiving the model.,

Images with some blurring cause the model to make a false prediction.

Frage 3

Nicht beantwortet

Erreichbare Punkte: 1,00

What is the advantage of using a pre-trained model for a new task?

Wählen Sie eine oder mehrere Antworten:

- [x] a. It allows models to be optimized quickly.
- [ ] b. It guarantees better performance than training from scratch.
- [ ] c. It increases the complexity of the model.
- [x] d. It does not need as much data as building a model from scratch.

Die Antwort ist falsch.

Die richtigen Antworten sind:
It does not need as much data as building a model from scratch.,

It allows models to be optimized quickly.

Frage 4

Nicht beantwortet

Erreichbare Punkte: 1,00

What are the disadvantages of transfer learning?

Wählen Sie eine oder mehrere Antworten:

- [x] a. Transfer learning can lead to overfitting if the model is fine-tuned too much on the second task, as it may learn task-specific features that do not generalize well to new data.
- [x] b. The pre-trained model and the fine-tuning process can be computationally expensive and may require specialized hardware.
- [x] c. The pre-trained model may not be well-suited to the second task if the two tasks are vastly different or the data distribution between the two tasks is very different.
- [x] d. The potential for negative transfer, where the knowledge from the source task hurts performance on the target task.

Die Antwort ist falsch.

Die richtigen Antworten sind:
The pre-trained model may not be well-suited to the second task if the two tasks are vastly different or the data distribution between the two tasks is very different.,

The potential for negative transfer, where the knowledge from the source task hurts performance on the target task.,

The pre-trained model and the fine-tuning process can be computationally expensive and may require specialized hardware.,

Transfer learning can lead to overfitting if the model is fine-tuned too much on the second task, as it may learn task-specific features that do not generalize well to new data.

Frage 5

Nicht beantwortet

Erreichbare Punkte: 1,00

What is the goal of transfer learning in deep learning?

Wählen Sie eine Antwort:

- a. To train neural networks from scratch.
- b. To transfer knowledge from the model trained on one task to a second related task.
- c. To guarantee the model's robustness.
- d. To make the structure of the neural network simple.

Die Antwort ist falsch.

Die richtige Antwort ist: To transfer knowledge from the model trained on one task to a second related task.

Frage 6

Nicht beantwortet

Erreichbare Punkte: 1,00

Translation invariance is obtained in CNNs by means of the

Wählen Sie eine Antwort:

- a. Pooling layers
- b. Linear layers
- c. Activation layers
- d. Convolutional layers

Die Antwort ist falsch.

Die richtige Antwort ist:
Pooling layers

Frage 7

Nicht beantwortet

Erreichbare Punkte: 1,00

Assume a transformation T, which shifts the position of the target in the input x by some amount, then a NN having translation invariance would satisfy the equation

Wählen Sie eine Antwort:

- a. $NN(T(x)) \neq T(NN(x))$
- b. $NN(T(x)) = NN(x)$
- c. $NN(T(x)) \neq NN(x)$
- d. $NN(T(x)) = T(NN(x))$

Die Antwort ist falsch.

Die richtige Antwort ist:
$NN(T(x)) = NN(x)$