

Started on	Monday, 10 November 2025, 12:12 PM
State	Finished
Completed on	Monday, 10 November 2025, 12:18 PM
Time taken	5 mins 51 secs
Marks	18.00/20.00
Grade	90.00 out of 100.00

Question 1

Complete

Mark 0.00 out of 1.00

Claude models are designed by Anthropic with a focus on:

- ☐ a. Code generation only
- ☐ b. Safety, helpfulness, and harmlessness
- ☐ c. Vision-language learning
- ☒ d. Reinforcement learning optimization

Question 2

Complete

Mark 1.00 out of 1.00

GitHub Copilot integrates most deeply with which IDE?

- ☐ a. PyCharm
- ☐ b. Eclipse
- ☒ c. VS Code
- ☐ d. IntelliJ

Question 3

Complete

Mark 1.00 out of 1.00

GitHub Copilot is primarily powered by which model?

- ☒ a. Codex
- ☐ b. GPT-3.5
- ☐ c. Claude Instant
- ☐ d. Llama 2

Question 4

Complete

Mark 1.00 out of 1.00

In neural networks, ReLU activation is preferred over Sigmoid because:

- ☐ a. It produces binary output
- ☐ b. It uses softmax normalization
- ☐ c. It's linear and always differentiable
- ☒ d. It's nonlinear and avoids vanishing gradients

Question 5

Complete

Mark 1.00 out of 1.00

The architecture behind GPT and Claude is based on:

- ☐ a. Autoencoders
- ☒ b. Transformers
- ☐ c. RNNs
- ☐ d. CNNs

Question 6

Complete

Mark 1.00 out of 1.00

The gradient descent algorithm minimizes which function?

- ☐ a. Regularization term
- ☐ b. Learning rate
- ☒ c. Cost or loss function
- ☐ d. Activation function

Question 7

Complete

Mark 1.00 out of 1.00

What distinguishes OpenAI GPT models from Anthropic Claude?

- ☒ a. Claude emphasizes constitutional AI for safer responses
- ☐ b. GPTs use diffusion models
- ☐ c. Claude is rule-based
- ☐ d. GPTs use smaller context windows

Question 8

Complete

Mark 1.00 out of 1.00

What does the term embedding refer to in modern AI?

- ☐ a. Creating new hidden layers
- ☒ b. Representing words or data as continuous numeric vectors
- ☐ c. Compressing datasets
- ☐ d. Storing models in memory

Question 9

Complete

Mark 1.00 out of 1.00

What is a system prompt in LLM usage (like OpenAI's API)?

- ☒ a. The initial instruction defining model behavior
- ☐ b. Batch loader
- ☐ c. A shell command for API setup
- ☐ d. Token encoder

Question 10

Complete

Mark 1.00 out of 1.00

What is overfitting in ML?

- ☐ a. When the model fits unseen data better than training data
- ☐ b. When model training takes too long
- ☒ c. When the model memorizes training data and fails to generalize
- ☐ d. When there are too many features in the dataset

Question 11

Complete

Mark 1.00 out of 1.00

What is the role of tokenization in LLMs?

- ☒ a. Splitting text into smaller subunits for processing
- ☐ b. Generating embeddings
- ☐ c. Encrypting data
- ☐ d. Reducing overfitting

Question 12

Complete

Mark 1.00 out of 1.00

What is transfer learning?

- ☐ a. Transferring models between GPUs
- ☒ b. Using a pre-trained model for a new but related task
- ☐ c. Re-training from scratch using same data
- ☐ d. Sharing weights between layers

Question 13

Complete

Mark 1.00 out of 1.00

Which fine-tuning technique aligns LLM responses with human preferences?

- ☐ a. Regularization
- ☐ b. Unsupervised pretraining
- ☒ c. RLHF (Reinforcement Learning from Human Feedback)
- ☐ d. Transfer learning

Question 14

Complete

Mark 1.00 out of 1.00

Which of the following best describes "context window" in an LLM?

- ☒ a. Amount of tokens model can process at once
- ☐ b. Number of layers in model
- ☐ c. GPU memory used
- ☐ d. Batch size

Question 15

Complete

Mark 1.00 out of 1.00

Which of the following best describes the difference between AI and ML?

- ☐ a. ML is broader than AI
- ☐ b. Both are identical fields
- ☒ c. ML is a subset of AI
- ☐ d. AI is a subset of ML

Question 16

Complete

Mark 0.00 out of 1.00

Which of the following is NOT a likely limitation of AI coding assistants like Copilot?

- ☒ a. Security vulnerability propagation
- ☐ b. Guaranteed correctness
- ☐ c. Dependency on context quality
- ☐ d. Code suggestion errors

Question 17

Complete

Mark 1.00 out of 1.00

Which of the following models is primarily unsupervised?

- ☐ a. Decision Trees
- ☐ b. Logistic Regression
- ☒ c. K-Means Clustering
- ☐ d. Random Forest

Question 18

Complete

Mark 1.00 out of 1.00

Which of the following OpenAI models is multimodal (supports image and text)?

- ☐ a. GPT-3
- ☐ b. Codex
- ☐ c. DALL-E 2
- ☒ d. GPT-4o

Question 19

Complete

Mark 1.00 out of 1.00

Which of the following techniques enables LLMs to attend to different words contextually?

- ☐ a. Reinforcement learning
- ☐ b. Recurrent feedback
- ☒ c. Self-attention
- ☐ d. Convolution

Question 20

Complete

Mark 1.00 out of 1.00

Why do LLMs often hallucinate?

- ☐ a. They lack mathematical grounding
- ☐ b. They have insufficient training data
- ☒ c. They predict likely text without factual verification
- ☐ d. They overfit on large datasets