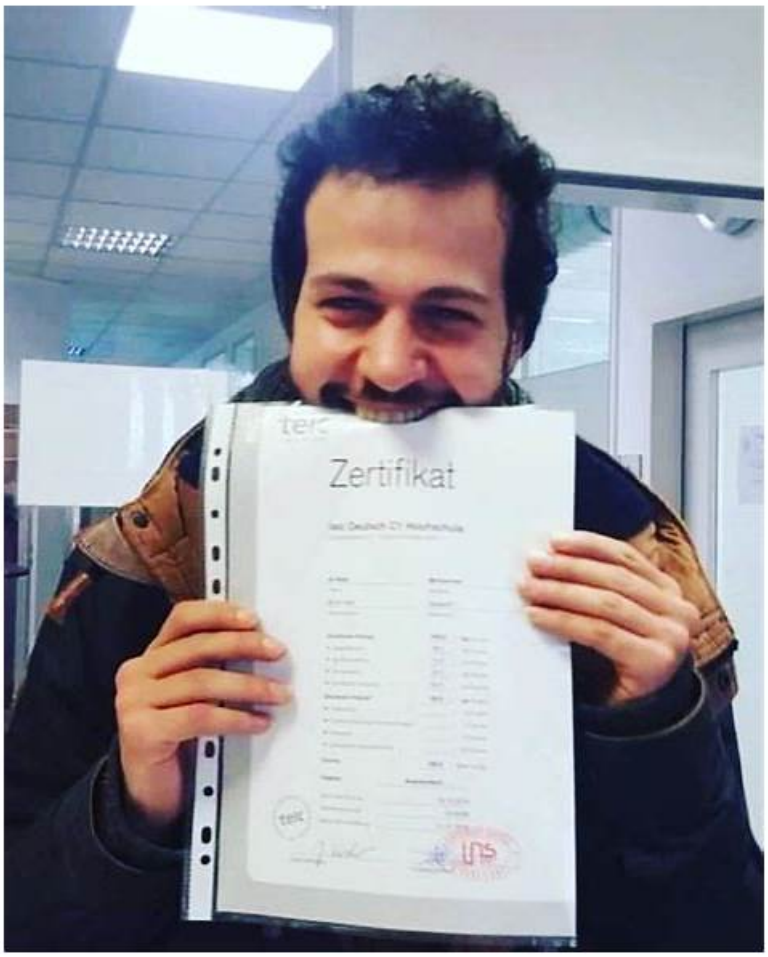
CT-AI Mit Hilfe von uns können Sie bedeutendes Zertifikat der CT-AI einfach erhalten!



BONUS!!! Laden Sie die vollständige Version der ZertFragen CT-AI Prüfungsfragen kostenlos herunter: https://drive.google.com/open?id=185TYzKXguEwIUOW5mCsbHGaMQRFQEDvb

Fühlen Sie sich sehr schwierig, erfolgreich zu werden? Fühlen Sie es sehr schwierig, IT-Zertifizierungsprüfungen zu bestehen? Sorgen Sie sich jetzt um die ISTQB CT-AI Zertifizierungsprüfung? Es ist unnötig. IT-Zertifizierungsprüfungen sind nicht so geheimnisvoll wie Sie glauben. Wir können richtige Geräte benutzen, erfolgreich zu werden. Solange Sie die richtigen Geräte wählen, ist es sehr einfach erfolgreich zu werden. Wissen Sie, was ist das beste Gerät? Ja, ISTQB CT-AI Dumps von ZertFragen sind die besten Geräte. Diese Dumps sammeln und analysieren viele vorherige CT-AI Prüfungsfragen. Und sie fügen auch viele neue Prüfungsfragen laut der Prüfungsvorschriften hinzu. Das ist die Dumps, die Sie ISTQB CT-AI Prüfung einmalig bestehen können.

ISTQB CT-AI Prüfungsplan:

Thema	Einzelheiten
Thema 1	• Neural Networks and Testing: This section of the exam covers defining the structure and function of a neural network including a DNN and the different coverage measures for neural networks.
Thema 2	• Quality Characteristics for AI-Based Systems: This section covers topics covered how to explain the importance of flexibility and adaptability as characteristics of AI-based systems and describes the vitality of managing evolution for AI-based systems. It also covers how to recall the characteristics that make it difficult to use AI-based systems in safety-related applications.

Thema 3	• Testing AI-Specific Quality Characteristics: In this section, the topics covered are about the challenges in testing created by the self-learning of AI-based systems.
Thema 4	• Methods and Techniques for the Testing of AI-Based Systems: In this section, the focus is on explaining how the testing of ML systems can help prevent adversarial attacks and data poisoning.
Thema 5	• Test Environments for AI-Based Systems: This section is about factors that differentiate the test environments for AI-based
Thema 6	• Testing AI-Based Systems Overview: In this section, focus is given to how system specifications for AI-based systems can create challenges in testing and explain automation bias and how this affects testing.
Thema 7	• systems from those required for conventional systems.

CT-AI Fragen Antworten - CT-AI Praxisprüfung

Unser ZertFragen bietet erstklassige Informationsressourcen zur IT-Zertifizierung. In ZertFragen können Sie die Lernhilfe sowie Lernmaterialien finden. Die Fragenkataloge zur ISTQB CT-AI Prüfung von ZertFragen werden von den IT-Fachleuten langfristig nach ihren Erfahrungen und Kenntnissen bearbeitet. Unsere Fragenkataloge haben eine hohe Genauigkeit und starke Logik. Benutzen Sie beruhigt unsere Fragenkataloge zur ISTQB CT-AI Zertifizierung von ZertFragen. Sie können sich ganz gut auf Ihre CT-AI Prüfung vorbereiten.

ISTQB Certified Tester AI Testing Exam CT-AI Prüfungsfragen mit Lösungen (Q74-Q79):

74. Frage
Pairwise testing can be used in the context of self-driving cars for controlling an explosion in the number of combinations of parameters.
Which ONE of the following options is LEAST likely to be a reason for this incredible growth of parameters?
SELECT ONE OPTION

- A. Different weather conditions
- B. ML model metrics to evaluate the functional performance
- C. Different features like ADAS, Lane Change Assistance etc.
- D. Different Road Types

Antwort: B

Begründung:
Pairwise testing is used to handle the large number of combinations of parameters that can arise in complex systems like self-driving cars. The question asks which of the given options isleast likelyto be a reason for the explosion in the number of parameters.
* Different Road Types (A): Self-driving cars must operate on various road types, such as highways, city streets, rural roads, etc. Each road type can have different characteristics, requiring the car's system to adapt and handle different scenarios. Thus, this is a significant factor contributing to the growth of parameters.
* Different Weather Conditions (B): Weather conditions such as rain, snow, fog, and bright sunlight significantly affect the performance of self-driving cars. The car's sensors and algorithms must adapt to these varying conditions, which adds to the number of parameters that need to be considered.
* ML Model Metrics to Evaluate Functional Performance (C): While evaluating machine learning (ML) model performance is crucial, it does not directly contribute to the explosion of parameter combinations in the same way that road types, weather conditions, and car features do. Metrics are used to measure and assess performance but are not themselves variable conditions that the system must handle.
* Different Features like ADAS, Lane Change Assistance, etc. (D): Advanced Driver Assistance Systems (ADAS) and other features add complexity to self-driving cars. Each feature can have multiple settings and operational modes, contributing to the overall number of parameters.
Hence, theleast likelyreason for the incredible growth in the number of parameters isC. ML model metrics to evaluate the functional

performance.
References:
* ISTQB CT-AI Syllabus Section 9.2 on Pairwise Testing discusses the application of this technique to manage the combinations of different variables in AI-based systems, including those used in self- driving cars.
* Sample Exam Questions document, Question #29 provides context for the explosion in parameter combinations in self-driving cars and highlights the use of pairwise testing as a method to manage this complexity.

75. Frage
The activation value output for a neuron in a neural network is obtained by applying computation to the neuron.
Which ONE of the following options BEST describes the inputs used to compute the activation value?
SELECT ONE OPTION

- A. Activation values of neurons in the previous layer, and weights assigned to the connections between the neurons.
- B. Individual bias at the neuron level, and weights assigned to the connections between the neurons.
- C. Individual bias at the neuron level, and activation values of neurons in the previous layer.
- D. Individual bias at the neuron level, activation values of neurons in the previous layer, and weights assigned to the connections between the neurons.

Antwort: D

Begründung:
In a neural network, the activation value of a neuron is determined by a combination of inputs from the previous layer, the weights of the connections, and the bias at the neuron level. Here's a detailed breakdown:
* Inputs for Activation Value:
* Activation Values of Neurons in the Previous Layer:These are the outputs from neurons in the preceding layer that serve as inputs to the current neuron.
* Weights Assigned to the Connections:Each connection between neurons has an associated weight, which determines the strength and direction of the input signal.
* Individual Bias at the Neuron Level:Each neuron has a bias value that adjusts the input sum, allowing the activation function to be shifted.
* Calculation:
* The activation value is computed by summing the weighted inputs from the previous layer and adding the bias.
* Formula: z=#(wi#ai)+bz = \sum (w_i \cdot a_i) + bz=#(wi#ai)+b, where wiw_iwi are the weights, aia_iai are the activation values from the previous layer, and bbb is the bias.
* The activation function (e.g., sigmoid, ReLU) is then applied to this sum to get the final activation value.
* Why Option A is Correct:
* Option A correctly identifies all components involved in computing the activation value: the individual bias, the activation values of the previous layer, and the weights of the connections.
* Eliminating Other Options:
* B. Activation values of neurons in the previous layer, and weights assigned to the connections between the neurons: This option misses the bias, which is crucial.
* C. Individual bias at the neuron level, and weights assigned to the connections between the neurons: This option misses the activation values from the previous layer.
* D. Individual bias at the neuron level, and activation values of neurons in the previous layer
This option misses the weights, which are essential.
References:
ISTQB CT-AI Syllabus, Section 6.1, Neural Networks, discusses the components and functioning of neurons in a neural network.
"Neural Network Activation Functions" (ISTQB CT-AI Syllabus, Section 6.1.1).

76. Frage
Which statement about AI-based test case generation is correct?
Choose ONE option (1 out of 4)

- A. An AI-based system under test must not be used as a functional test oracle.
- B. AI-generated functional test cases typically result in poor requirements coverage.
- C. A different test oracle is usually required for each AI-generated functional test case.
- D. Expected results may not be available for AI-generated functional test cases.

Antwort: D

Begründung:
The ISTQB CT-AI syllabus indicates inSection 5.2 - AI for Testingthat AI-generated test cases may not come withpredefined expected results. This is because test-case generation methods-such as evolutionary algorithms, reinforcement learning, or clustering-based sampling-produceinputs, but the tester must still determine the correct outputs. Therefore, OptionCis correct: expected results may not be available, especially when AI produces novel or previously unseen input combinations.
Option A is incorrect: AI-based test generation can improve coverage by exploring large input spaces. Option B is incorrect because the need for oracles does not depend on whether the test case is AI-generated. Option D is incorrect because the syllabus allows using a model as an oracle inback-to-back testing, provided limitations are understood.
Therefore,Option Cis the correct syllabus-aligned statement.

77. Frage
A team of software testers is attempting to create an AI algorithm to assist in software testing. This particular team has gone through over 40 iterations of testing and cannot afford to spend as much time as it takes to run the full regression test suite. They are hoping to have the algorithm reduce the amount of testing required thus reducing the time needed for each testing cycle.
How can an AI-based tool be expected to assist in this reduction?

- A. By using a clustering method to quantify the relationships between test cases and then assigning each test case to a category
- B. By using A/B testing to compare the last update with the newest change and compare metrics between the two
- C. By performing bayesian analysis to estimate the types of human interactions that are expected to be seen in the system and then selecting those test cases
- D. By performing optimization of the data from past iterations to see where the most common defects occurred and select the corresponding test cases

Antwort: D

Begründung:
AI-based tools can significantly optimize regression test suites by analyzing historical data, past test results, associated defects, and changes made to the software. These tools prioritize and select the most relevant test cases based on previous defect patterns and frequently failing features, which helps in reducing the test execution time while maintaining effectiveness.
The optimization process involves:
* Prioritizing test cases:AI-based tools rank test cases based on past defect detection trends, ensuring that the most relevant tests are executed first.
* Reducing redundant test cases:The tool can eliminate test cases that do not contribute significantly to defect detection, reducing overall test execution time.
* Augmenting test cases:The AI can also suggest new test cases if certain features are more prone to defects.
This approach has been proven to reduce regression test suite sizes by up to 50% while maintaining fault detection capabilities.
* Section 11.4 - Using AI for the Optimization of Regression Test Suitesstates that AI-based tools can optimize regression test suites by analyzing past test data and defect occurrences, leading to significant reductions in test execution time.
Reference from ISTQB Certified Tester AI Testing Study Guide:

78. Frage
Which ONE of the following tests is LEAST likely to be performed during the ML model testing phase?
SELECT ONE OPTION

- A. Testing the speed of the prediction by the model.
- B. Testing the speed of the training of the model.
- C. Testing the API of the service powered by the ML model.
- D. Testing the accuracy of the classification model.

Antwort: B

Begründung:
The question asks which test is least likely to be performed during the ML model testing phase. Let's consider each option:
* Testing the accuracy of the classification model (A): Accuracy testing is a fundamental part of the ML model testing phase. It ensures that the model correctly classifies the data as intended and meets the required performance metrics.
* Testing the API of the service powered by the ML model (B): Testing the API is crucial, especially if the ML model is deployed as part of a service. This ensures that the service integrates well with other systems and that the API performs as expected.

* Testing the speed of the training of the model (C): This is least likely to be part of the ML model testing phase. The speed of training is more relevant during the development phase when optimizing and tuning the model. During testing, the focus is more on the model's performance and behavior rather than how quickly it was trained.
* Testing the speed of the prediction by the model (D): Testing the speed of prediction is important to ensure that the model meets performance requirements in a production environment, especially for real- time applications.
References:
* ISTQB CT-AI Syllabus Section 3.2 on ML Workflow and Section 5 on ML Functional Performance Metrics discuss the focus of testing during the model testing phase, which includes accuracy and prediction speed but not the training speed.

79. Frage
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Die ISTQB CT-AI Zertifizierungsprüfung ist der erste Schritt zum Berufserfolg für IT-Fachleute. Durch die ISTQB CT-AI Zertifizierungsprüfung haben Sie schon den ersten Fuß auf die Spitze Ihrer Karriere gesetzt. ZertFragen wird Ihnen helfen, die ISTQB CT-AI Zertifizierungsprüfung zu bestehen.