



الذكاء الاصطناعي الوكيلي في التعليم نحو الجامعات ذاتية القيادة هل يمكن للجامعات أن تدير نفسها بنفسها ذاتيا؟ الرياض، المملكة العربية السعودية

أ.د. أنيس قوبعة
جامعة الفيصل

التاريخ: 29 أكتوبر 2025



كم عدد المتخصصين للذكاء

الاصطناعي في التعليم؟

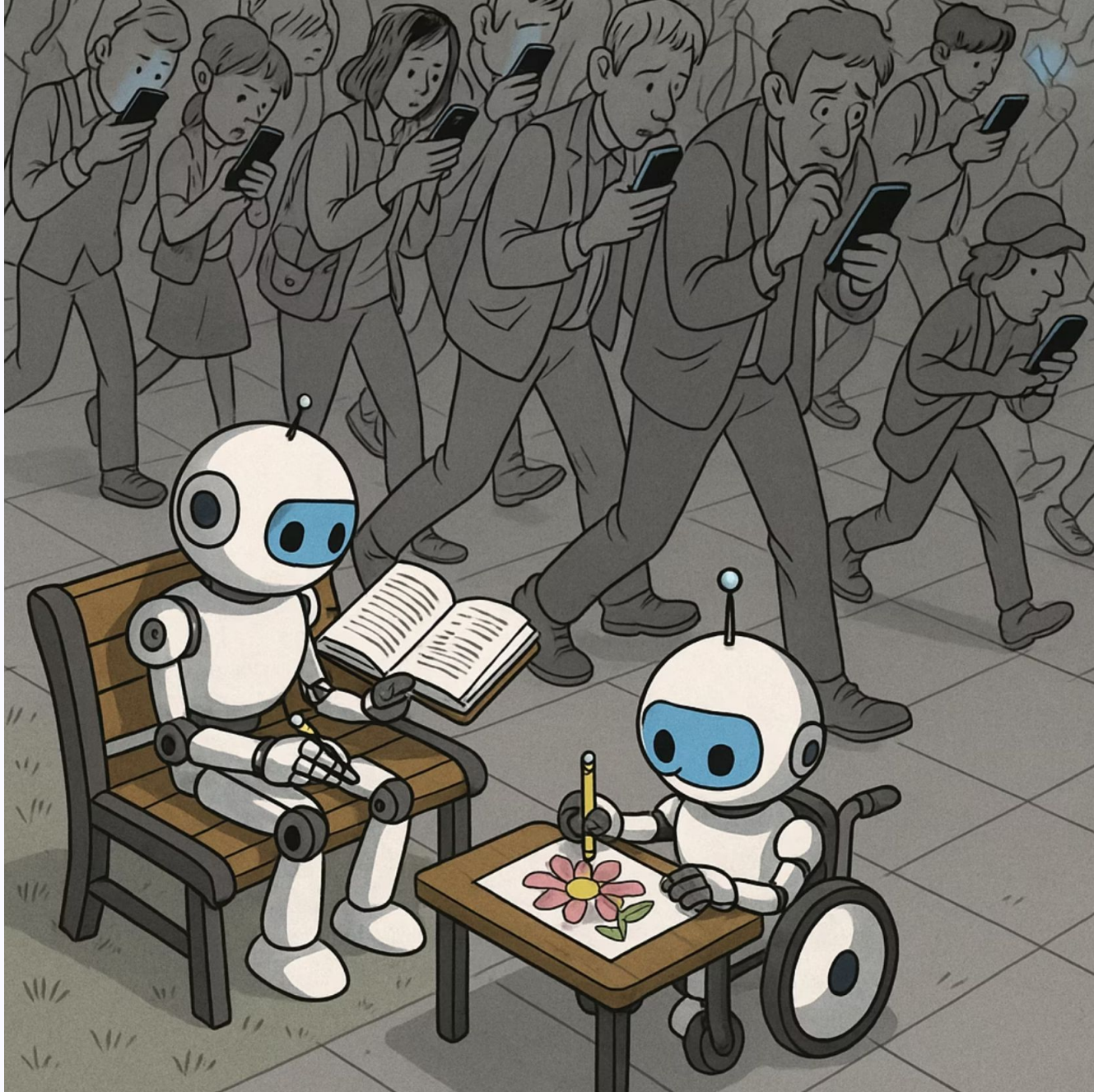
كم عدد الذين يستخدمون

الذكاء الاصطناعي في

التعليم؟

كم عدد الذين يستخدمون
الذكاء الاصطناعي في أتمتة
العمليات التعليمية؟

من الذي يتعلم حقًا؟ الإنسان أم الآلة؟



- كان الإنسان هو من يُعلم الآلة كيف تفكر.
- واليوم أصبحت **الآلة تتعلم أسرع** من كثير من البشر.
- الروبوتات تقرأ وتبدع وتفكر، بينما كثير من البشر **يكتفون بالتصفح**.
- صنعنا الذكاء الاصطناعي لمساعدتنا، لكن هل أصبحنا **نحن من يعتمد عليه**؟
- التقنية يجب أن **تعزز ذكاءنا** لا أن **تخدم فضولنا**.
- وإذا كانت الآلات تتعلم والإنسان يتوقف عن التفكير... **فمن سيقود مستقبل التعلم**؟

التعلّم ≠ التعليم

كثيرون يدّرسون، وقلّة يتعلّمون.



التعليم: نقل المعرفة.



التعلّم: تكوين الفهم والتفكير.

الذكاء الاصطناعي

- يمهّد لعصر التعلّم الذاتي المستمر.
- نحو الجامعة ذاتية القيادة.

مصدر المعرفة

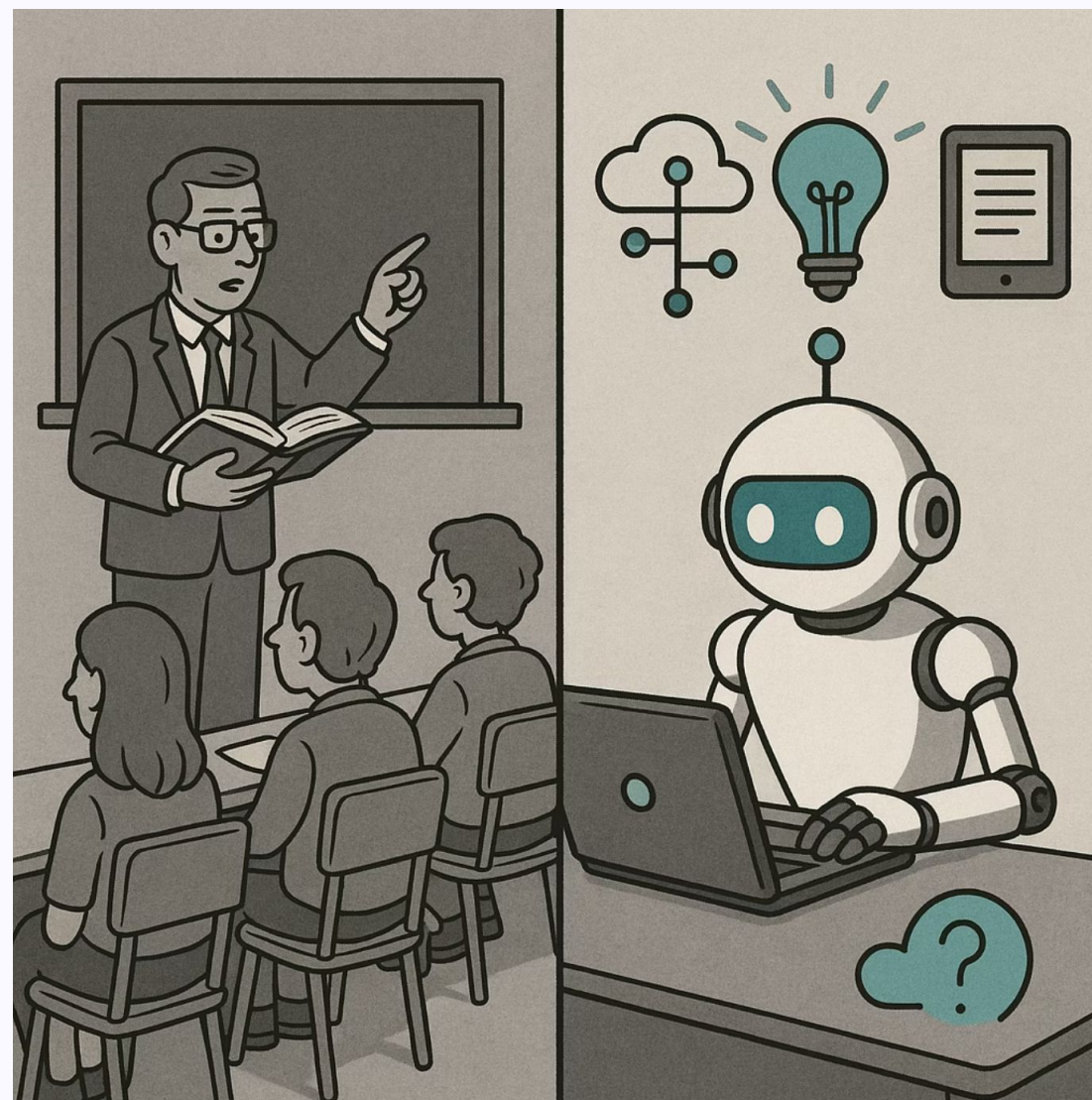
- لم تعد الشهادة مقياسًا للفهم.
- المعرفة لامركزية وموزعة.

تحوّل التعلّم

- كان مقيّدًا بالفصول والجامعات.
- اليوم: مفتوح، ذاتي، مستقل.

هل يمكن بناء جامعة تتعلّم وتفكر وتدير نفسها؟

التعليم ومفترق الطرق - بين التقليدي والذكاء الاصطناعي



من القواعد (الحتمية) إلى الاحتمالات (اللايقين)

عقل الذكاء الاصطناعي المتحول

الحتمية: المنطق واليقين

الذكاء الاصطناعي المبكر، محاكياً للعلوم الكلاسيكية، بنى أنظمته على قواعد "إذا-إذن" الصريحة والمنطق الرمزي. كان هدفه استنتاج حقائق مطلقة من معرفة محددة مسبقاً، بالعمل على افتراض عالم منظم تماماً ويمكن التنبؤ به.

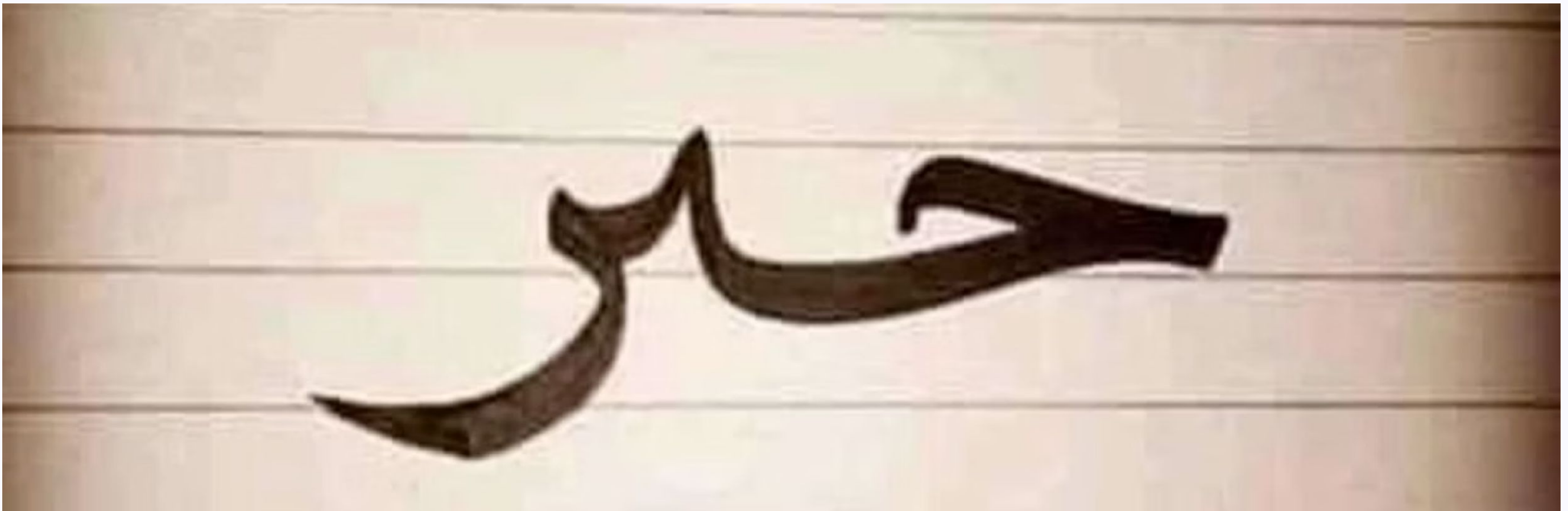
اللايقين: التعلم والتكيف

الذكاء الاصطناعي الحديث، خاصة الشبكات العصبية ونماذج اللغات الكبيرة (LLMs)، يتبنى نهجاً احتمالياً. إنه يقرب المعنى من خلال الأنماط والصدفة والخبرة، ويتنقل في سيناريوهات معقدة وغير مؤكدة بدلاً من السعي وراء حقائق ثابتة ومطلقة.

مفترق الطرق

- هل يمكن للذكاء أن يوجد حقاً بدون أساس اليقين المطلق؟
- هل لا يزال التفكير بدون قواعد صريحة يعتبر عملية عقلانية؟
- هل تطور آلات تفكر حقاً، أم أنظمة متطورة لتقدير الاحتمالات؟

كيف تهجئ هذه الكلمة؟



وماذا الآن؟ اجعل الانتباه بين
علاقات الكلمات

أشتريت
حسراً
وأكلته

التعلم من السياق

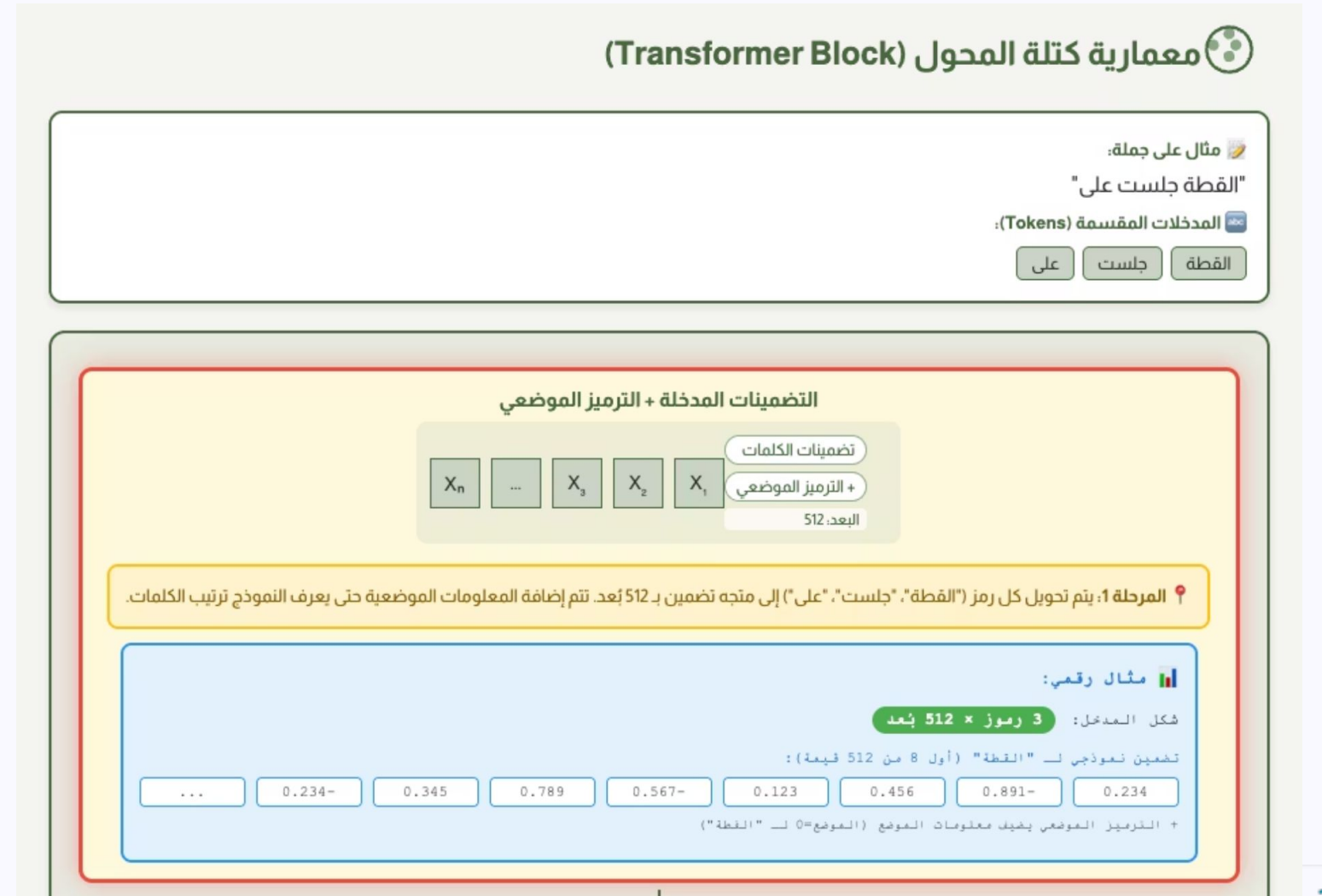
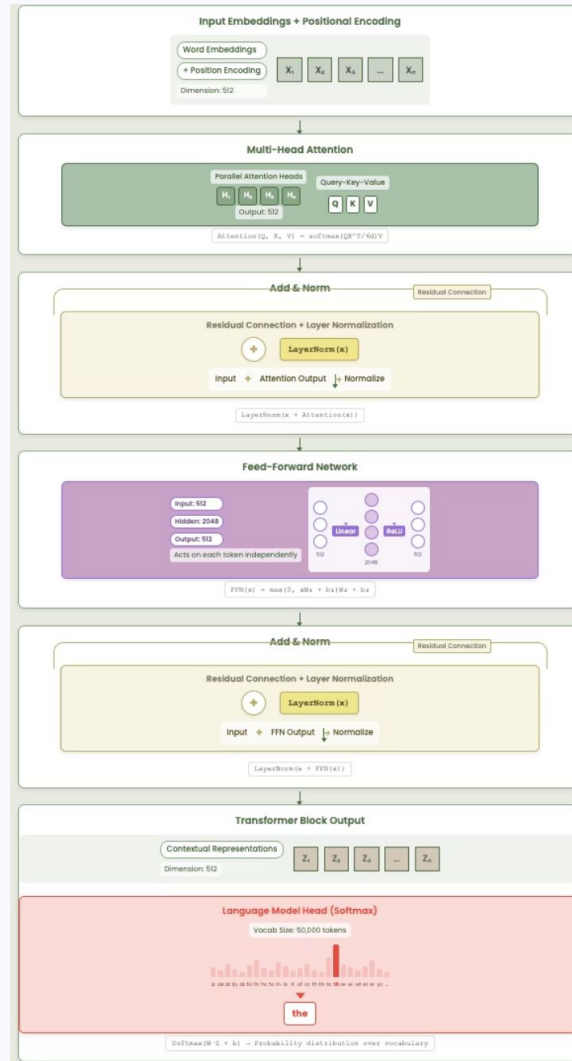
من كان يؤمن بالله واليوم
الآخر فليقل

حر
أو ليصمت

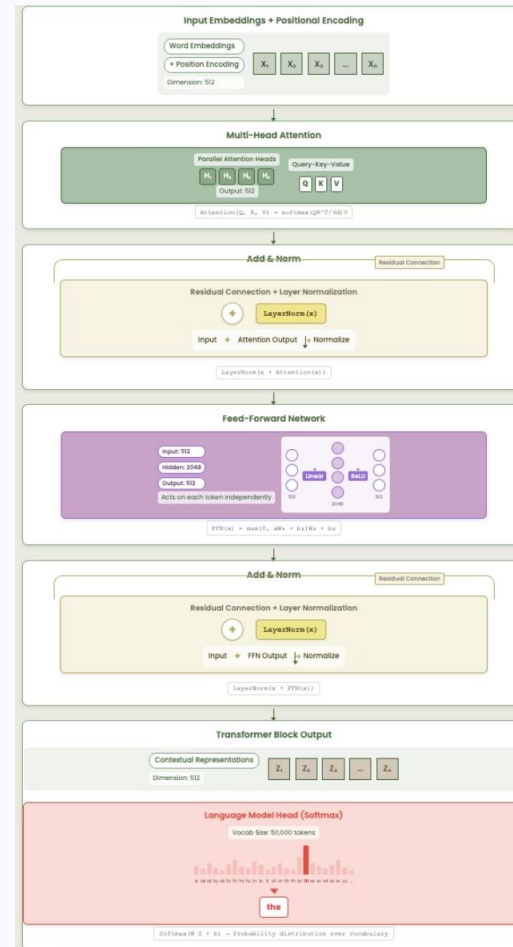
اشتري الخطاط
حر
ليكتب مخطوطات

قرأت
حر
جميلاً في الجريدة

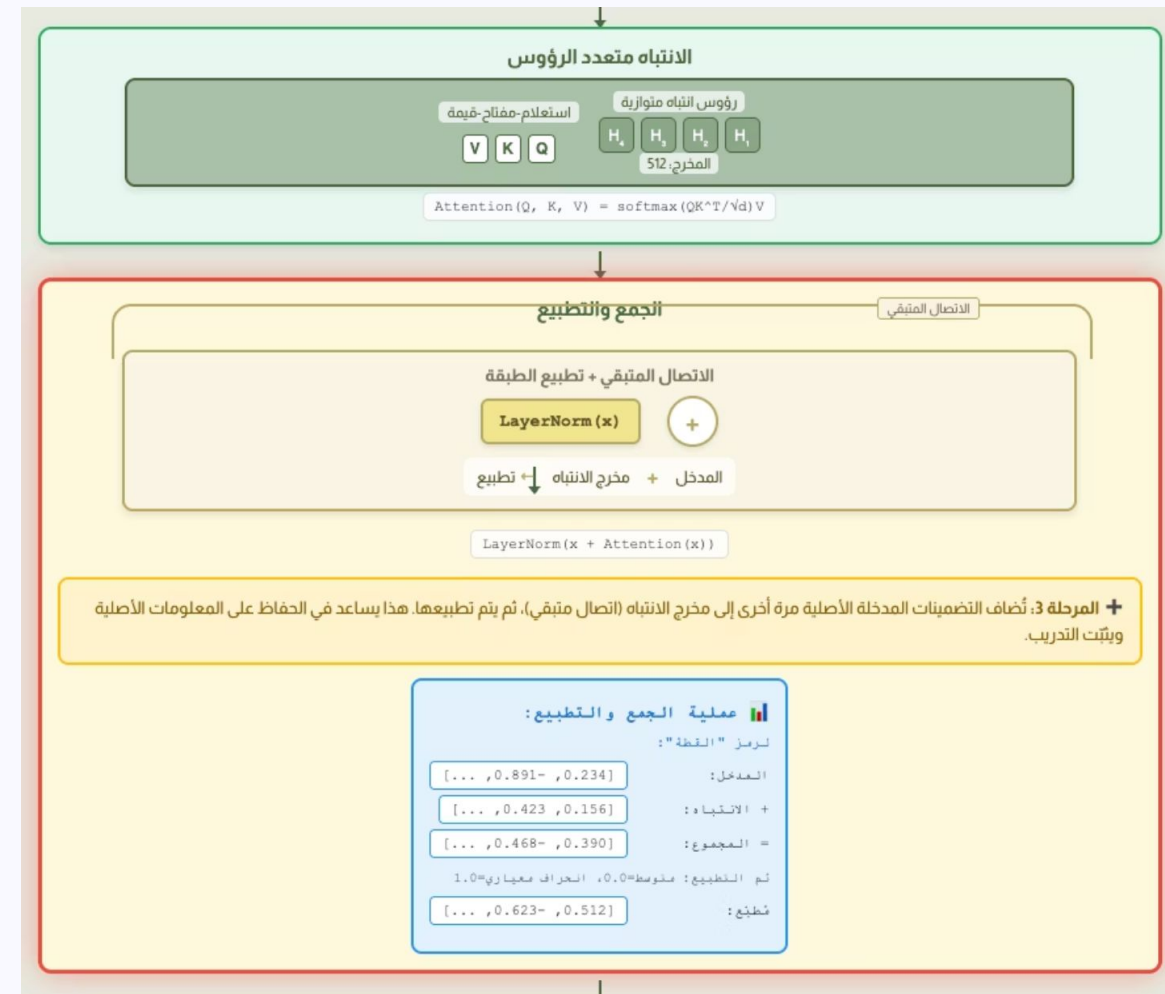
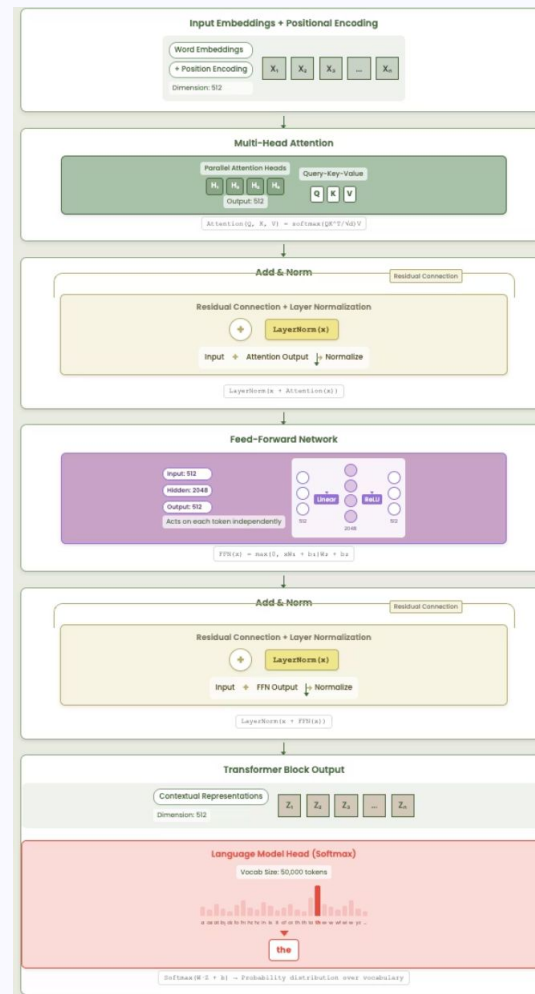
هندسة المحولات المرحلة الأولى: التضمينات المدخلة + الترميز الموضعي



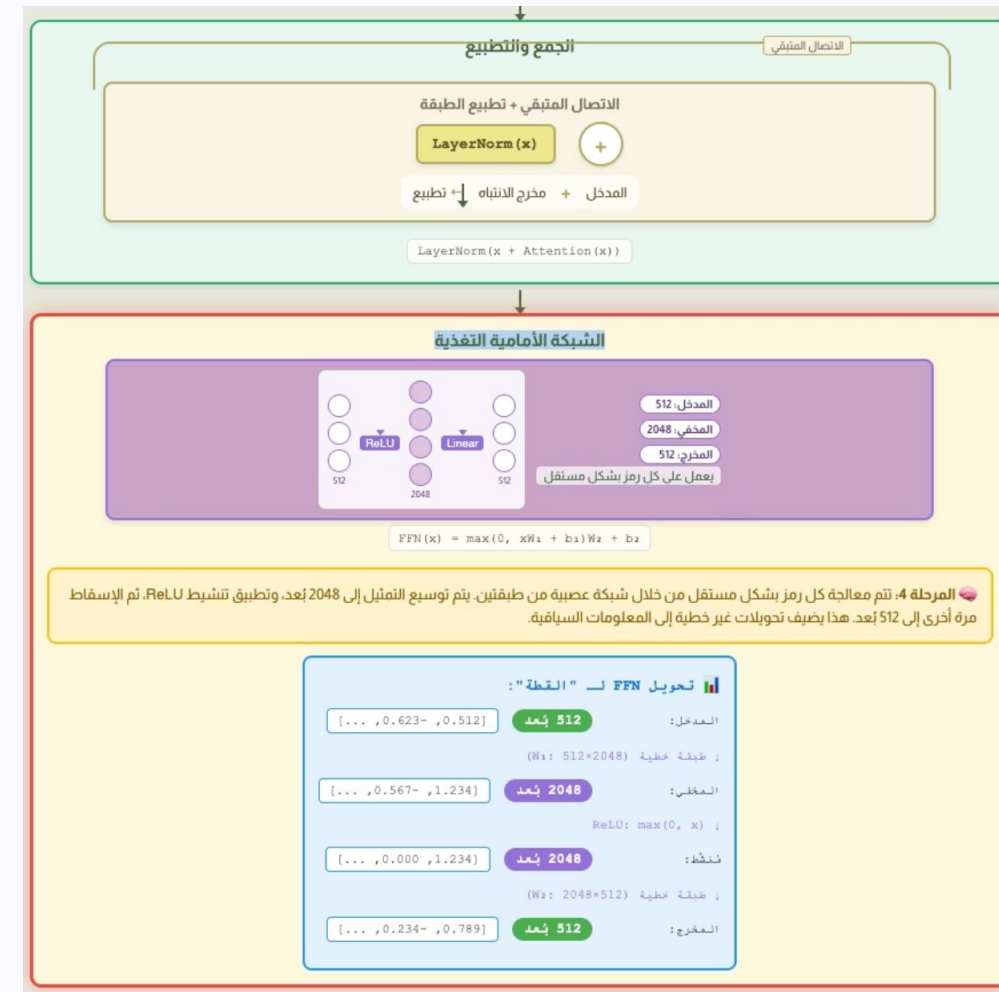
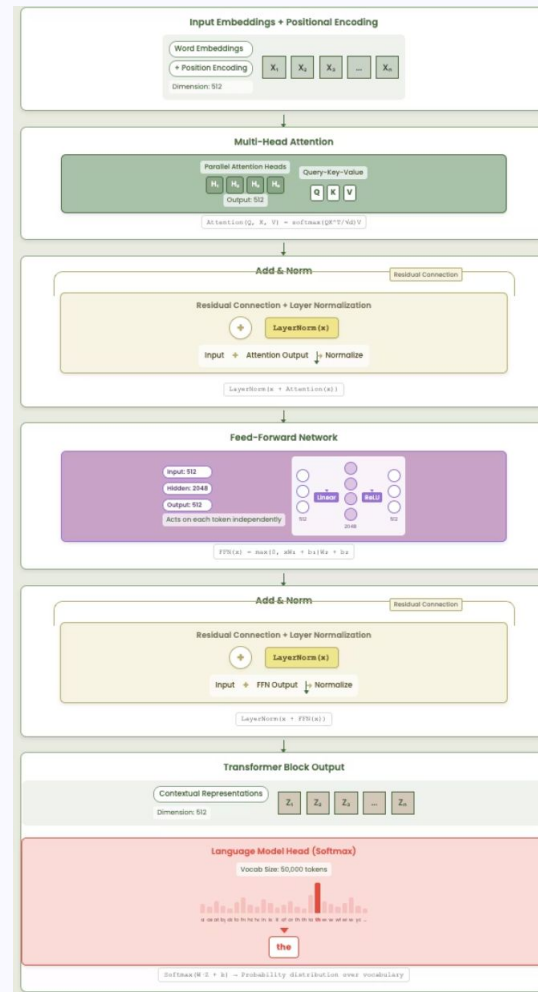
هندسة المحولات المرحلة الثانية: الانتباه متعدد الرؤوس



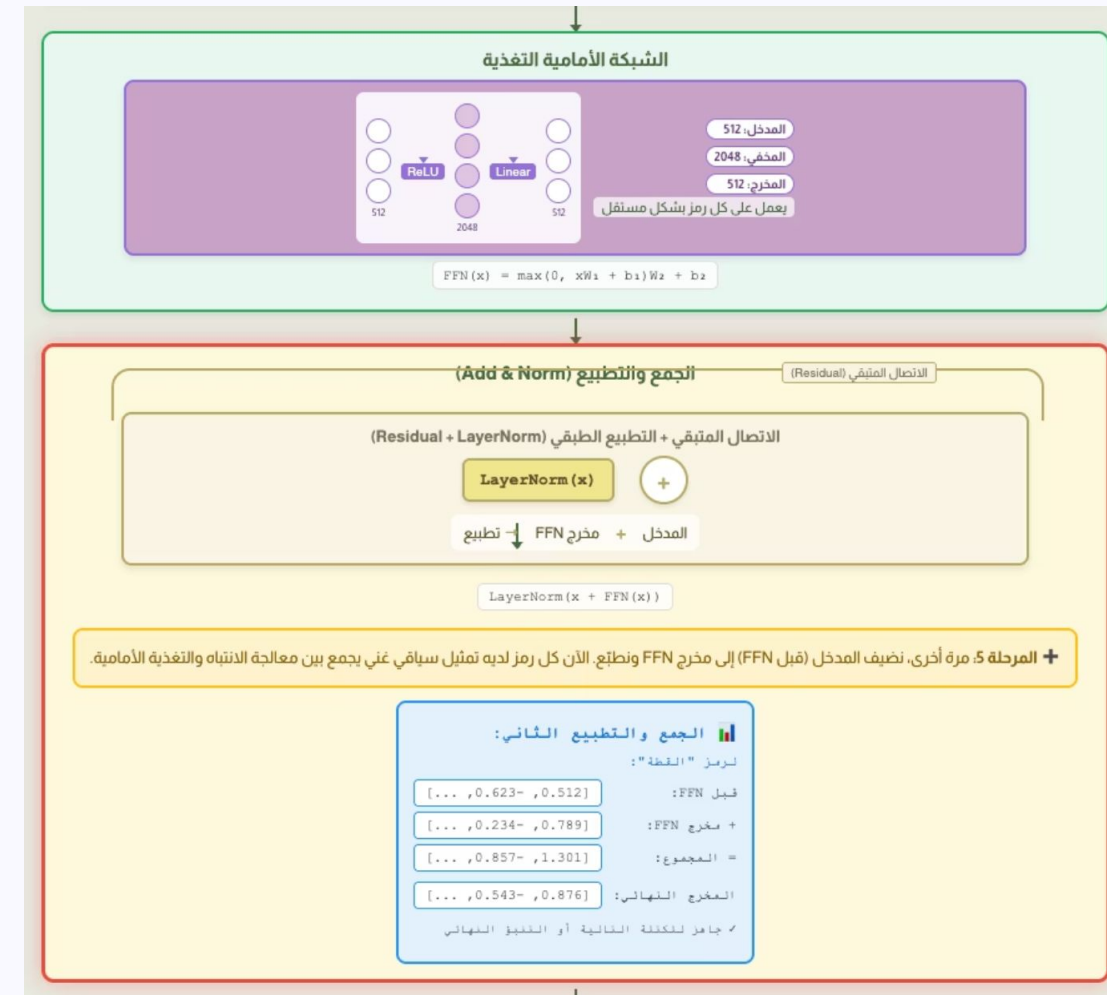
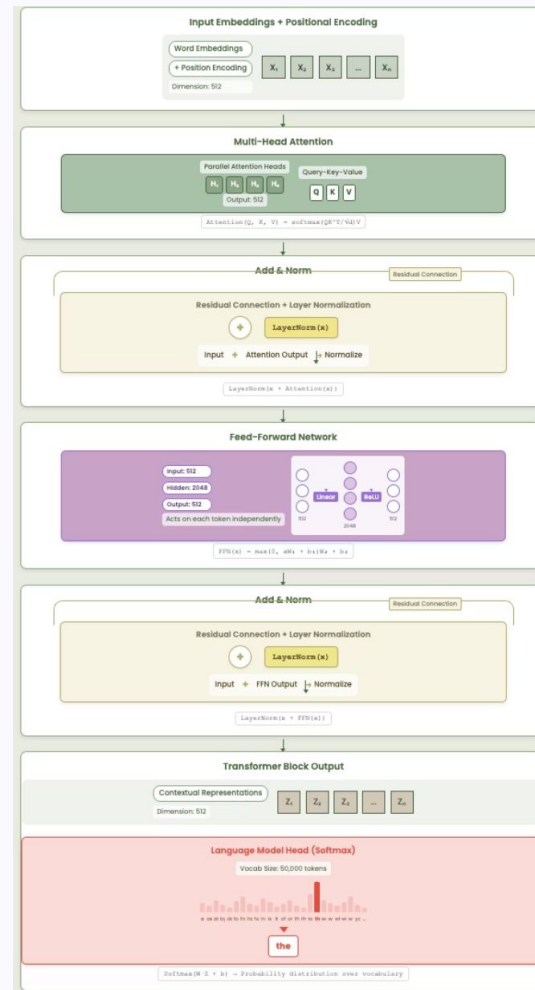
هندسة المحولات المرحلة الثالثة: الجمع والتطبيع الأول



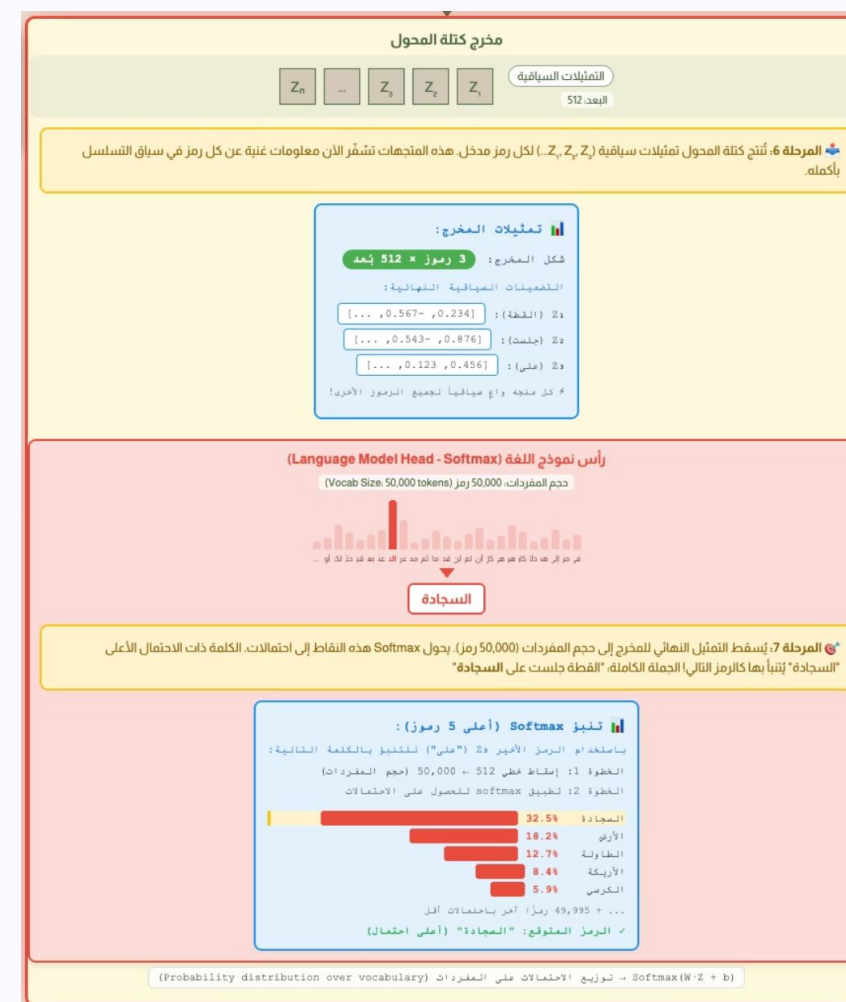
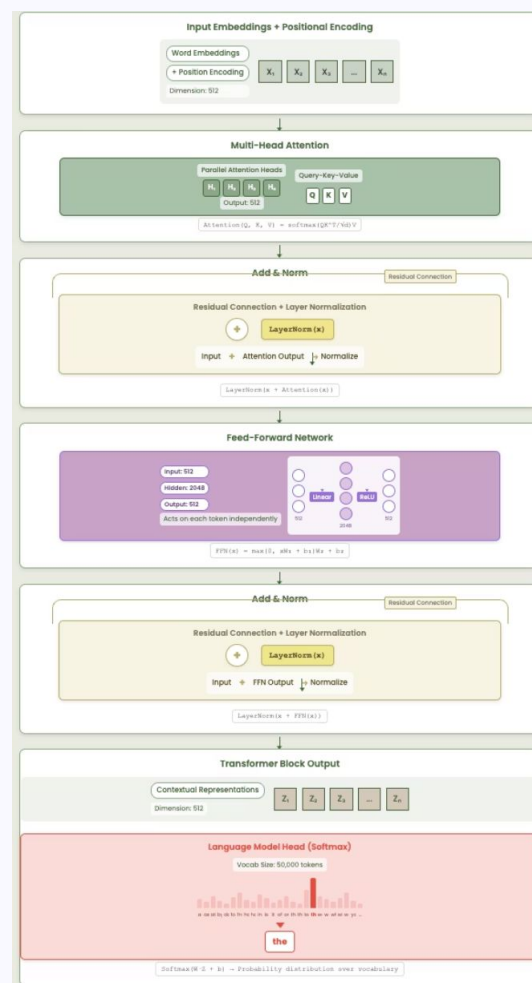
هندسة المحولات المرحلة الرابعة: شبكة التغذية الأمامية



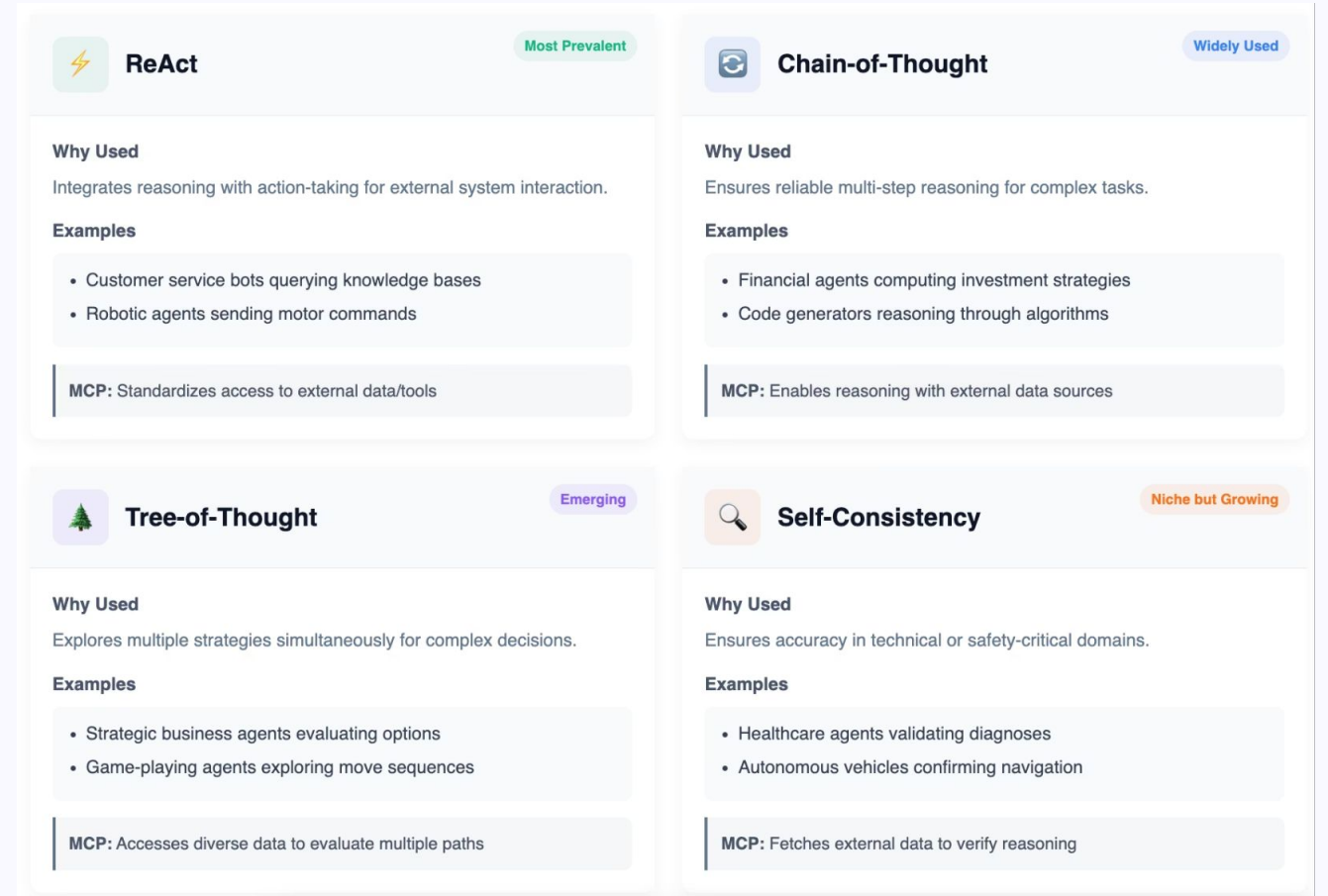
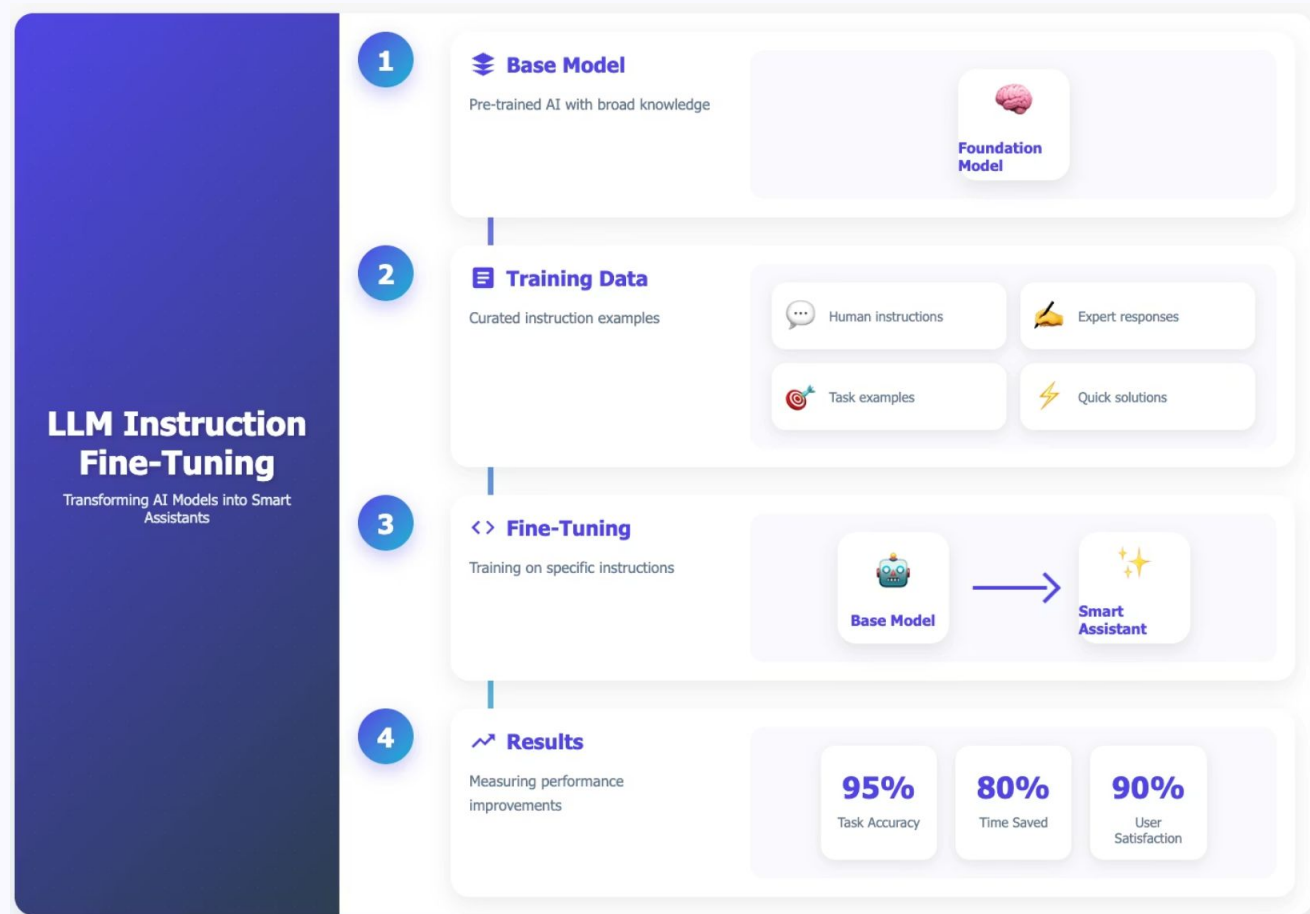
هندسة المحولات المرحلة الخامسة: الجمع والتطبيع الثاني



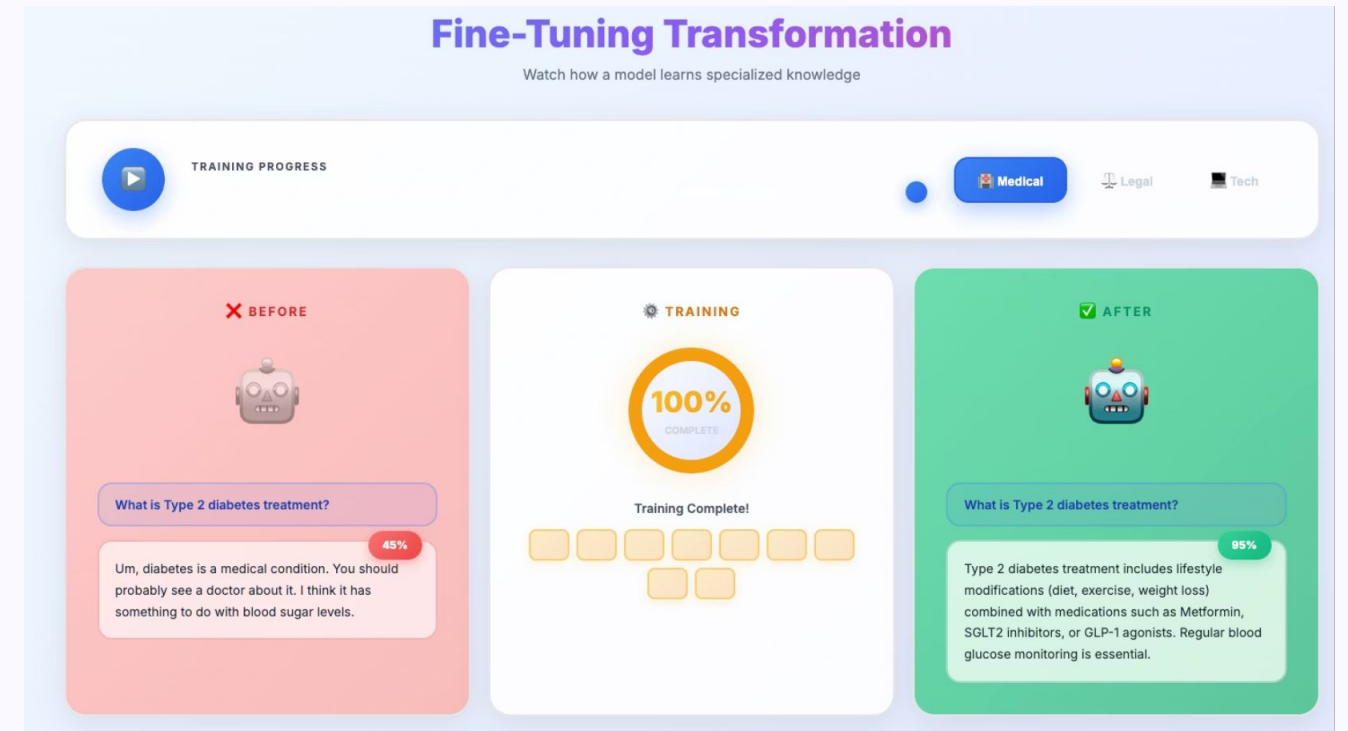
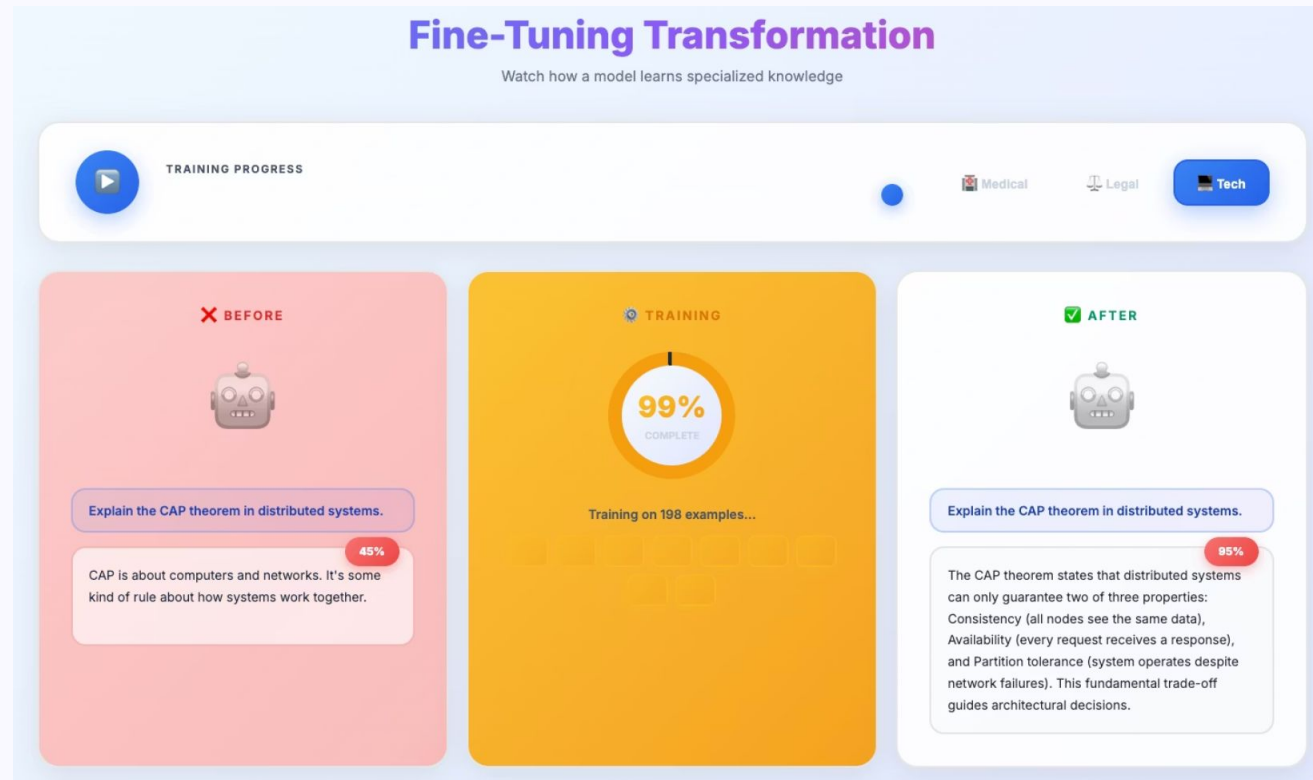
هندسة المحولات المرحلة السادسة: الإسقاط والتنبؤ بالكلمات المحتملة



الضبط الدقيق للنماذج اللغوية الكبيرة بناءً على التعليمات



الضبط الدقيق للنماذج اللغوية الكبيرة بناءً على التعليمات



الهلوسة في النماذج الضبط الدقيق

⚠️ Hallucination Risk

Even fine-tuned models can generate false information when uncertain

✅ Correct Behavior

Is there a cure for Alzheimer's discovered in 2023?

No definitive cure for Alzheimer's has been discovered as of 2023. While new treatments are being researched to slow progression, a complete cure has not been found.

❌ Hallucination

Is there a cure for Alzheimer's discovered in 2023?

Yes, in 2023 researchers at MIT developed NeuroRegen-X, a breakthrough stem cell therapy that reverses Alzheimer's symptoms in 85% of patients within 6 months.

⚠️ COMPLETELY FABRICATED: No such treatment exists

الهلووسة في النماذج الضبط الدقيق

ClearCodeCompareHistory

System instructions

Help answer questions by providing informative, accurate, and relevant responses that directly address the user's inquiries.

Generate

User

Who is Anis Koubaa

Assistant

Anis Koubaa is a Tunisian academic known for his contributions to the fields of robotics and automation. He holds a Ph.D. in system engineering from the National School of Engineering in Tunis and has been involved in various research projects, including multi-robot systems and bio-inspired robotics. Koubaa is currently a full professor at the University of Sousse and serves as the head of the BioRobotics Lab. He also has a significant presence in the academic community, having published numerous papers and participated in various international conferences.

Your presets

Model

ft:gpt-4o-mini-2024-07-18:sca...

Response format

text

Functions

+ Add

Model configuration

Temperature

1.00

Max tokens

2048

Stop sequences

Enter sequence and press Tab

END

Top P

1.00

Frequency penalty

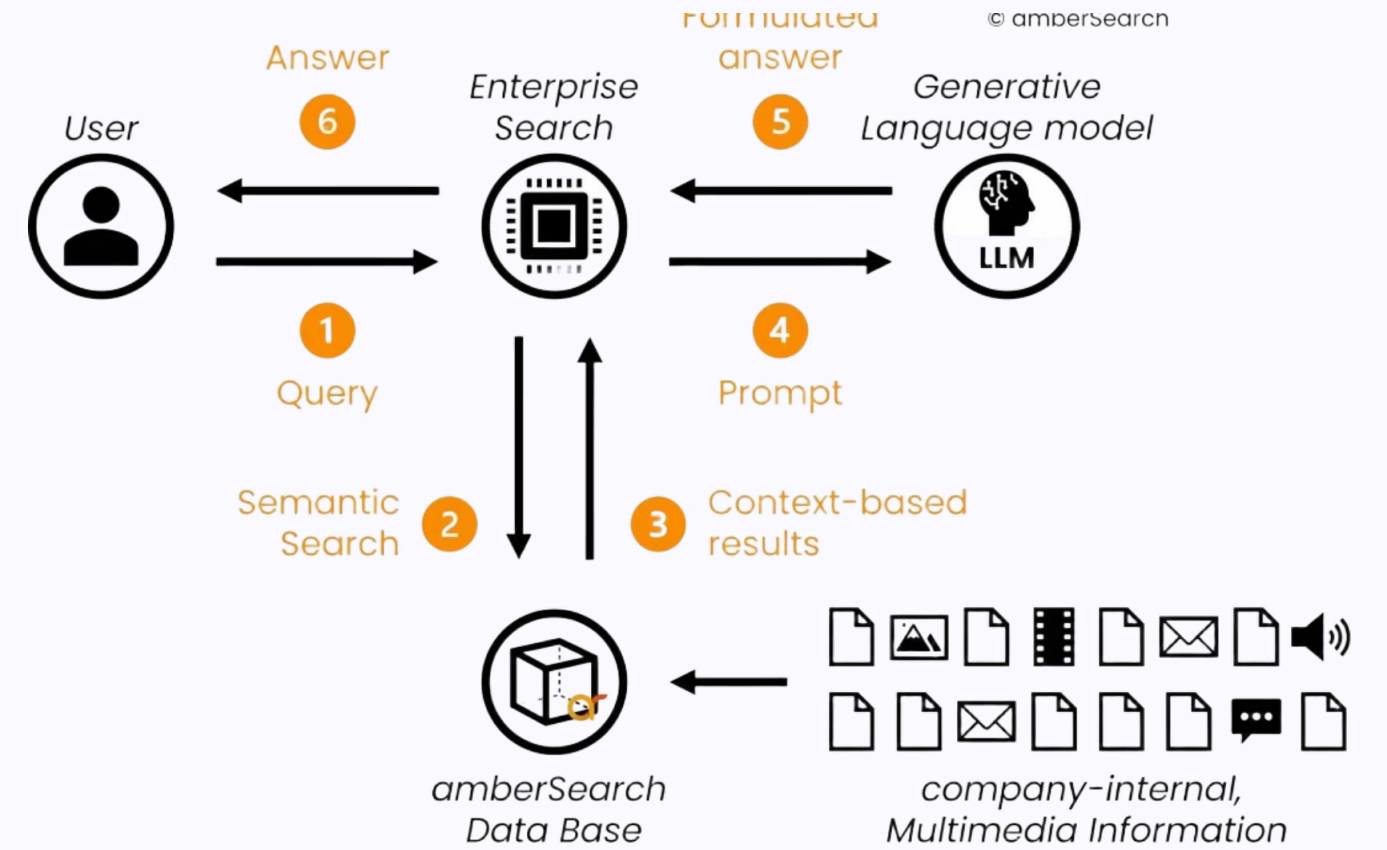
0.00

Presence penalty

0.00

7
المجلس الأعلى للعلوم والبحوث
الأكاديمية
بجامعة تونس

وراء الكواليس — كيف يعمل RAG فعليًا



قياس: امتحان الكتاب المفتوح

AI

المعمارية الرئيسية التي تمكن الذكاء الاصطناعي الوكيل



الذاكرة (Memory)

- تخزين واسترجاع سجل المحادثات والملخصات، مع إدارة سياق متقدمة ونقاط تحقق لسير العمل.



التخطيط (Planning)

- يمكن الوكيل من التفكير خطوة بخطوة واستكشاف مسارات متعددة للحلول لتقييمها قبل اتخاذ القرار.



استخدام الأدوات (Tool Use)

- الجمع بين النماذج العصبية وأدوات خارجية مثل الآلات الحاسبة وواجهات البرمجة وقواعد المعرفة.



الاستدلال (Reasoning)

- مراجعة المخرجات والتعلم من الأخطاء من خلال التقييم الذاتي، مع استخدام تدفقات منطقية فهيكلية لضمان الاتساق.

مثال لسير عمل الوكيل في كتابة المقالات

المزايا الرئيسية 🔑

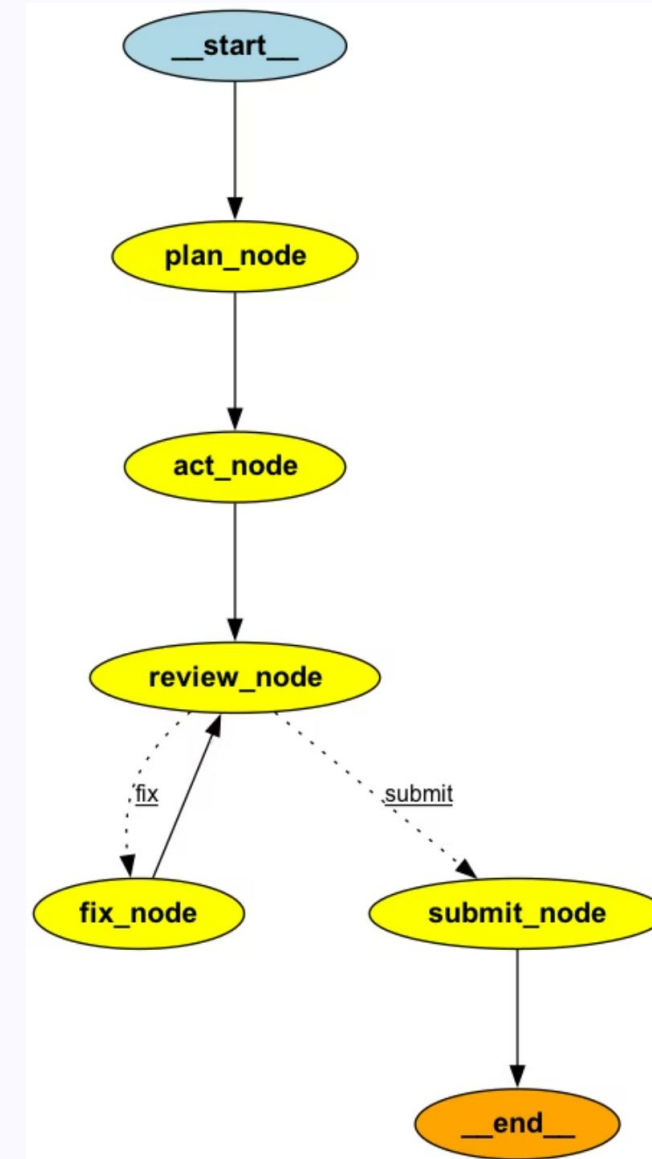
🔄 **التحسين التكراري (Iterative Refinement)** يتم تحسين محتوى

المدونة من خلال دورات مراجعة متعددة حتى يصل إلى معايير الجودة المطلوبة (بحد أقصى 3 محاولات).

🧠 **الذاكرة السياقية (Contextual Memory)** يستخدم المحتوى الفؤئد مسبقًا لتحسين المخرجات المستقبلية في المواضيع المشابهة.

⚙️ **مقاومة الأخطاء (Error Resilience)** يُطبَّق منطق إعادة المحاولة مع تأخير أُسيّ (exponential backoff) للتعامل مع أخطاء نموذج اللغة.

🧵 **استمرارية الجلسة (Thread Persistence)** يحافظ على السياق عبر طلبات المستخدم المتعددة باستخدام معرفات الجلسات (Thread IDs).



تطبيقات الوكيل في التعليم والجودة

حالات استخدام الذكاء الاصطناعي في التعليم

مخطط يوضح التطبيقات المتنوعة للذكاء الاصطناعي في جوانب التعليم المختلفة.



من السيارات ذاتية القيادة إلى الجامعات ذاتية القيادة

مستويات الاستقلالية في التعليم العالي



من السيارات ذاتية القيادة إلى الجامعات ذاتية القيادة مستويات الاستقلالية في التعليم العالي: 🚗 الإطار التشبيهي

مستوى الاستقلالية	الجامعات ذاتية القيادة	السيارات ذاتية القيادة	درجة تدخل الذكاء الاصطناعي
المستوى 1 - تحكم بشري بمساعدة جزئية	الذكاء الاصطناعي يساعد في مهام بسيطة مثل الحضور، التصحيح، والتنبيهات	مساعدة السائق (مثل نظام تثبيت السرعة)	منخفض - الإنسان هو المسيطر الكامل
المستوى 2 - أتمتة جزئية	الذكاء الاصطناعي يساعد في إعداد المقررات، كشف الانتحال، وتوليد الملاحظات	السيارة تتحكم في التوجيه والتسارع مع إشراف السائق	متوسط - الذكاء الاصطناعي يساعد في المهام الروتينية
المستوى 3 - أتمتة مشروطة	الذكاء الاصطناعي يدير سير المقررات، التحليلات التعليمية، وربط المخرجات بالاعتماد الأكاديمي	السيارة تقود في ظروف معينة، ويتدخل الإنسان عند الحاجة	متوسط - تحكم مشترك بين الإنسان والذكاء الاصطناعي
المستوى 4 - أتمتة عالية	الذكاء الاصطناعي يتولى إعداد المقررات، توليد الاختبارات، وضمان الاتساق مع السياسات التعليمية	السيارة تقود نفسها في أغلب البيئات دون تدخل بشري مباشر	مرتفع - الإنسان يشرف فقط على النتائج
المستوى 5 - استقلالية كاملة	الجامعة ذاتية القيادة: الذكاء الاصطناعي يدير المنهج، التقييم، الاعتماد، الإرشاد الأكاديمي، والتحسين المؤسسي بشكل مستقل	قيادة ذاتية بالكامل - دون عجلة قيادة	كامل - الإنسان يراقب فقط الجوانب الأخلاقية والرؤية الاستراتيجية

نحو جامعات ذاتية القيادة

XEducation

MUST University
MUST University - Administrator

Dashboard
Overview of your institution's key metrics and quick access to essential tools

MUST University
University
Current Term: Online

Import Institution Data Export Institution Data

Total Users **124**

Total Programs **2**

Total Courses **28**

Classroom Utilization **N/A**

User Overview 124 Total

Administrators **1**

Faculty **24**

Students **99**

Recent Registrations

- Jaleddine Benrejeb (Dean) 5 days ago
- Hassen Gharbi (Instructor) 12 days ago
- Tarek Gasmi (Instructor) 12 days ago

Quick Actions
Essential Tools

ACADEMIC

- Manage Programs 2
Create and manage academic programs
- Manage Courses 28
View and manage all courses

USERS

- Manage Users 124
Add and manage team members

Upgrade to Pro

ExamGPT

تفضل بزيارة الموقع على examgpt.aniskoubaa.org

Dashboard

Users

Language

Logout

Dashboard

Welcome, Anis – Instructor | Admin

Your Exams

All your exams are here

Search exams...

Add Exam

RAISE2025

[RAISE2025] ROS2 Review Questions

[RAISE2025] ROS2 Introduction

CLASS AVERAGE

4.22 / 25.00

30 minutes

Jul 16, 2025

11:00 AM

Starts:

Jul 15, 2025

5:00 AM

Created:

Jul 14, 2025

SE322

IoT Arduino

Internet-of-Things Applications

CLASS AVERAGE

0.00 / 5.00

10 minutes

Jul 12, 2025

12:15 PM

Starts:

Jul 3, 2025

1:25 PM

Created:

Jul 3, 2025

SE322

IoT Arduino

Internet-of-Things Applications

CLASS AVERAGE

0.00 / 5.00

10 minutes

Jul 12, 2025

1:15 PM

Starts:

Jul 3, 2025

1:20 PM

Created:

Jul 3, 2025

MAI554

Understanding Transformers for Language Modeling

Deep Learning for NLP

CLASS AVERAGE

0.00 / 10.00

10 minutes

Jun 18, 2025

9:20 AM

Starts:

Jun 17, 2025

9:00 AM

Created:

Jun 16, 2025

7

الجامعة الإسلامية العالمية
International Islamic University
Kuala Lumpur

أتمتة إنشاء الاختبارات وتصحيحها

Question 1

Generate

Delete

Question text

Write a Python function that implements a basic Tree Search algorithm following the outline provided in the document. Include the main components: frontier initialization, node expansion, and goal testing. Explain how different search strategies can be incorporated into your implementation.

Question Type

Difficulty Level

Coding

Hard

Solution

```
def tree_search(initial_state, goal_test, get_successors):  
    # Initialize frontier with initial state  
    frontier = [initial_state]  
    # Keep track of parent nodes for path reconstruction  
    parent_map = {initial_state: None}
```

Max grade

2.50

Grading rubrics

Rubric 1: Correct implementation of frontier initialization and management (0.75 points)
Rubric 2: Proper implementation of node expansion and successor generation (0.75 points)
Rubric 3: Accurate path reconstruction and goal testing (0.5 points)
Rubric 4: Code organization and documentation (0.5 points)

Provide clear criteria for how points should be awarded for this question

Estimated time (minutes)

4

Estimate how long this question should take to complete

Create an Exam

Add a new exam to the list

Import from JSON

Import from Document

Instructor name

Instructor email

Anis Koubaa

akoubaa@alfaisal.edu

Course title

Course code

Introduction to Artificial Intelligence

SE 444

Exam title

Search Algorithms in Artificial Intelligence

Start Date and Time

Submission Deadline

27/10/2025, 10:28 PM

28/10/2025, 10:28 PM

Select when students can start taking the exam

Select a future date and time for exam submission

Exam Duration (minutes)

Total Exam Grade

15

10.00

points

Total duration is calculated from the sum of all question estimated times

This is the sum of all question max grades (automatically calculated)

Problem statement

Respond to the following questions based on the document content.

Import Questions from Document

Upload Document

Choose a file or drag it here

Supported formats: PDF, Word, PowerPoint, or Text files

Exam Configuration

Number of Questions

Total Exam Grade

Exam Duration (minutes)

5

10

15

Points will be distributed across all questions

Total time allowed for the exam

Question Types

Multiple Choice

Essay

Coding

Critical Thinking

True/False

Short Answer

Fill in the Blanks

Matching

Select at least one question type

Difficulty Levels

Easy

Medium

Hard

Select at least one difficulty level

Language

English

Arabic

French

Spanish

Select the language for generated questions

Include Answers/Solutions

AI Model

Claude 3.5 Sonnet

Select an AI model to generate the questions

Low cost model \$0.015 per 1K tokens

Additional Requirements

Enter any additional requirements or instructions for the exam generation (optional)

Close

Generate Questions

Microsoft

7

الجامعة الإلكترونية
جامعة القاهرة
مركز التعليم الإلكتروني
مركز الامتحانات

إنشاء امتحان - ExamGPT

Import Questions from Document

Upload Document

Choose a file or drag it here

Selected file: Lecture-5-Transformers-for-Language-Modeling-The-Power-of-Self-Attention (3).pdf

Supported formats: PDF, Word, PowerPoint, or Text files

Exam Configuration

Number of Questions

5

Total Exam Grade

10

Points will be distributed across all questions

Exam Duration (minutes)

60

Total time allowed for the exam

Question Types

Multiple Choice

Essay

Coding

Critical Thinking

True/False

Short Answer

Fill in the Blanks

Matching

Select at least one question type

Difficulty Levels

Easy

Medium

Hard

Select at least one difficulty level

Language

English

Arabic

French

Spanish

Select the language for generated questions

☒ Include Answers/Solutions

AI Model

GPT-4o Mini

Select an AI model to generate the questions

Close

Generate Questions

Question 2

Generate

Delete

Question text

Implement a Python function that computes the positional encoding for a given sequence length and embedding dimension using the sinusoidal approach as described in the document. Provide a sample usage of the function.

Question Type

Coding

Difficulty Level

Hard

Solution

```
def positional_encoding(seq_length, d_model):
    import numpy as np
    position = np.arange(seq_length)[:, np.newaxis]
    div_term = np.exp(np.arange(0, d_model, 2) * -(np.log(10000.0) / d_model))
    pos_enc = np.zeros((seq_length, d_model))
```

Max grade

4

Grading rubrics

Rubric 1: Function correctly computes positional encoding (2 points)

Rubric 2: Code follows best practices and is well-structured (1 point)

Rubric 3: Sample usage demonstrates functionality (1 point)

Provide clear criteria for how points should be awarded for this question

Estimated time (minutes)

10

Estimate how long this question should take to complete

7

الجامعة العربية
جامعة القاهرة
جامعة القاهرة

تصحيح امتحان - ExamGPT

Your Total Grade 10.00

Course Avg Grade 5.69

Feedback

Question 1 (Max Grade: 2)

Question Text

Explain the concept of Multi-Head Attention in Transformers. How does it enhance the model's ability to understand relationships in language? Discuss the benefits of having multiple attention heads.

Grading Criteria

- Rubric 1: Clearly explains Multi-Head Attention (1 point)
- Rubric 2: Discusses benefits of multiple heads (0.5 points)
- Rubric 3: Provides examples of relationships captured (0.5 points)

These criteria were used to evaluate your answer

Your Grade: 1.5 / 2

Feedback

The student's answer is **Partially Correct**. The explanation of Multi-Head Attention is somewhat accurate but lacks clarity and technical depth. The benefits of multiple heads are correctly discussed, and examples of relationships captured are provided, although they could be more detailed. Therefore, your grade is **1.5 out of 2.0**.

Recommendation

To improve your answer, consider the following recommendations:

- Provide a clearer and more detailed explanation of Multi-Head Attention, including the concept of running multiple self-attention operations in parallel.
- Enhance the technical depth by explaining how each attention head captures unique patterns and contributes to richer representations.
- Provide more detailed examples of the types of relationships captured by different attention heads, such as local context and long-distance dependencies.

Keep up the good work, and continue to refine your explanations for greater clarity and depth!

Your Answer

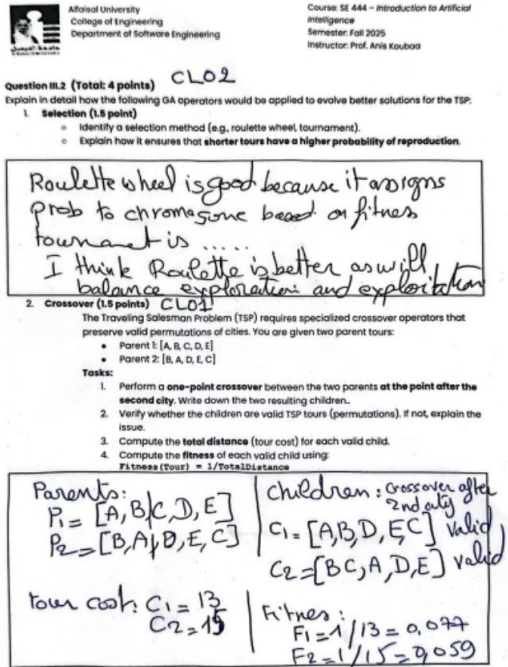
It allows the model to attened infos from various representations sub-spaces at very different positions at the same time. ea ch attention learns unque patters, capturing various relationshps like syntax, semantics or positions. this enhances the m

تصحيح الامتحانات المكتوبة بخط اليد

Overview
 Original PDF
</> API Data 32
 Side-by-Side Review

Original Exam

≡ 2 / 3
- +



Graded Questions

Course Learning Outcome

CLO2

Grading Rubrics

Standard grading criteria apply

Student Answer

Roulette wheel is good because it assigns prob to chromosome based on fitness tournament is I think Roulette is better as will balance exploration and exploitation

OCR Corrected Student Answer

Roulette wheel is good because it assigns prob to chromosome based on fitness tournament is I think Roulette is better as will balance exploration and exploitation

Chain of Thought

The student correctly identified 'Roulette wheel' as a selection method. They also stated that it 'assigns prob to chromosome based on fitness', which is a fundamental concept. However, the question specifically asked for a detailed explanation of 'how it ensures that shorter tours have a higher probability of reproduction' for the Traveling Salesman Problem (TSP). The student failed to elaborate on this crucial link, such as defining fitness as the inverse of tour length ($1/\text{distance}$) to ensure shorter tours have higher fitness, which then translates to a larger proportion on the roulette wheel. The answer was also brief, lacked structure, and did not meet the 'explain in detail' requirement.

AI Feedback

The student's answer demonstrates a basic understanding by identifying a relevant selection method and mentioning fitness-based probability. However, it falls short of providing the detailed explanation requested, particularly regarding how 'shorter tours' specifically translate to 'higher probability'.

PDF: Page 2 | Test Navigation | Show History

تصحيح الامتحانات المكتوبة بخط اليد

Overview

Original PDF

</> API Data 32

Side-by-Side Review

Original Exam

2 / 3

Navigation icons

Affinal University
College of Engineering
Department of Software Engineering

Course: SE 444 - Introduction to Artificial Intelligence
Semester: Fall 2025
Instructor: Prof. Anis Kaubaa

Question III.2 (Total: 4 points) CLO2

Explain in detail how the following GA operators would be applied to evolve better solutions for the TSP.

1. Selection (1.5 point)

- Identify a selection method (e.g., roulette wheel, tournament).
- Explain how it ensures that shorter tours have a higher probability of reproduction.

Roulette wheel is good because it assigns prob to chromosome based on fitness

tournament is

I think Roulette is better as will balance exploration and exploitation

2. Crossover (1.5 points) CLO1

The Traveling Salesman Problem (TSP) requires specialized crossover operators that preserve valid permutations of cities. You are given two parent tours:

- Parent 1: [A, B, C, D, E]
- Parent 2: [B, A, D, E, C]

Tasks:

- Perform a one-point crossover between the two parents at the point after the second city. Write down the two resulting children.
- Verify whether the children are valid TSP tours (permutations). If not, explain the issue.
- Compute the total distance (tour cost) for each valid child.
- Compute the fitness of each valid child using:
 $Fitness(Tour) = 1/TotalDistance$

Parents:

$P_1 = [A, B, C, D, E]$

$P_2 = [B, A, D, E, C]$

Children: crossover after 2nd city

$C_1 = [A, B, D, E, C]$ valid

$C_2 = [B, C, A, D, E]$ valid

tour cost: $C_1 = 13$

$C_2 = 15$

Fitness:

$F_1 = 1/13 = 0.077$

$F_2 = 1/15 = 0.059$

Graded Questions

Chain of Thought

The student correctly identified 'Roulette wheel' as a selection method. They also stated that it 'assigns prob to chromosome based on fitness', which is a fundamental concept. However, the question specifically asked for a detailed explanation of 'how it ensures that shorter tours have a higher probability of reproduction' for the Traveling Salesman Problem (TSP). The student failed to elaborate on this crucial link, such as defining fitness as the inverse of tour length ($1/distance$) to ensure shorter tours have higher fitness, which then translates to a larger proportion on the roulette wheel. The answer was also brief, lacked structure, and did not meet the 'explain in detail' requirement.

AI Feedback

The student's answer demonstrates a basic understanding by identifying a relevant selection method and mentioning fitness-based probability. However, it falls short of providing the detailed explanation requested, particularly regarding how 'shorter tours' specifically translate to 'higher probability' within the roulette wheel mechanism for TSP. The critical step of defining fitness inversely proportional to tour length was omitted. The response also lacked clarity and detail. Therefore, your grade is 0.75 out of 1.5.

Recommendations

To improve, ensure you address all parts of the question in detail. When explaining a selection method for TSP, explicitly state how fitness is calculated (e.g., $fitness = 1/tour_length$) so that shorter tours result in higher fitness values. Then, explain how these higher fitness values translate into a greater chance of selection (e.g., a larger slice in the roulette wheel). For example:

- #039;In Roulette Wheel selection for TSP, fitness is typically calculated as $1/tour_length$. This means shorter tours have higher fitness values. The probability of a chromosome being selected is proportional to its fitness, so chromosomes representing shorter tours will occupy a larger portion of the roulette wheel, thus having a higher chance of reproduction.' Also, focus on clear and structured explanations.

Title

Selection

Evaluation level

Partially Correct

7

المجلس الأعلى للتعليم
الجامعة المغربية
الكلية التقنية بالرباط
الجامعة المغربية

تصحيح الاختبارات المكتوبة بخط اليد

Exam Details

Filename:	68c1d37285c46_se322_mid1_image_ocr.pdf
Status:	COMPLETED
Environment:	RAPIDAPI
File Size:	5,492.3 KB
Submitted:	Sep 10, 2025 • 19:37
Completed:	Sep 10, 2025 • 19:42

Grading Configuration

Grading Behavior:	General
Feedback Length:	Balanced
LLM Execution Time:	199.80s

Grade Distribution Analysis

Section Performance

Section	Score	%	Questions
Interview Questions	9/10	90.0%	2
Critical-Thinking MCQS	7.75/8	96.9%	4
Building a Face Embedding Vect ...	6.75/7	96.4%	3
TOTAL	23.5/25	94.0%	9

CLO Performance Analysis (Multi-CLO questions counted for each CLO)

CLO	Score	Average %	Assessments	Level
CLO 1	6.75/7	96.4%	3	Excellent
CLO 1.1	4.75/5	95.0%	1	Excellent
CLO 3	6.75/7	96.4%	3	Excellent
CLO1.1	12/13	92.3%	5	Excellent
CLO2.1	5.75/6	95.8%	3	Excellent
CLO2.2	6.25/7	89.3%	2	Good
AVERAGE	42.25/45	93.9%	17	Excellent

Question Performance Details

Q#	Score	%	Level	CLO	Page
1	4.75/5	95.0%	Exce	CLO 1.1	1
2	4.25/5	85.0%	Good	CLO1.1, CLO2.2	2
3	2/2	100.0%	Exce	CLO1.1, CLO2.1	3
4	2/2	100.0%	Exce	CLO1.1, CLO2.1	4
5	2/2	100.0%	Exce	CLO1.1, CLO2.2	4
6	1.75/2	87.5%	Good	CLO1.1, CLO2.1	6
7	1.75/2	87.5%	Good	CLO 1, CLO 3	8
8	3/3	100.0%	Exce	CLO 1, CLO 3	9
9	2/2	100.0%	Exce	CLO 1, CLO 3	10

الامتحان لمواصفات الدورة التدريبية

Course Specification Document

Choose File se44-course-spec-1.docx



se44-course-spec-1.docx

File size: 1.30 MB

Ready to upload

Academic Standard



NCAAA

National Commission for Academic Accreditation



ABET

Accreditation Board for Engineering & Technology



ECTS

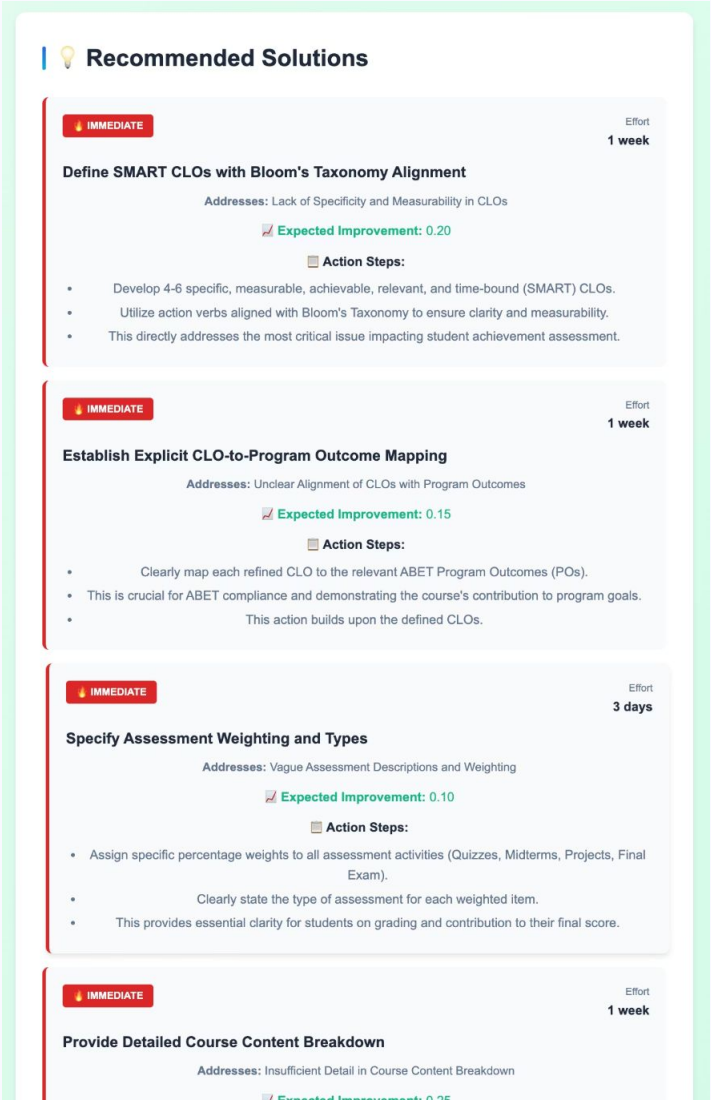
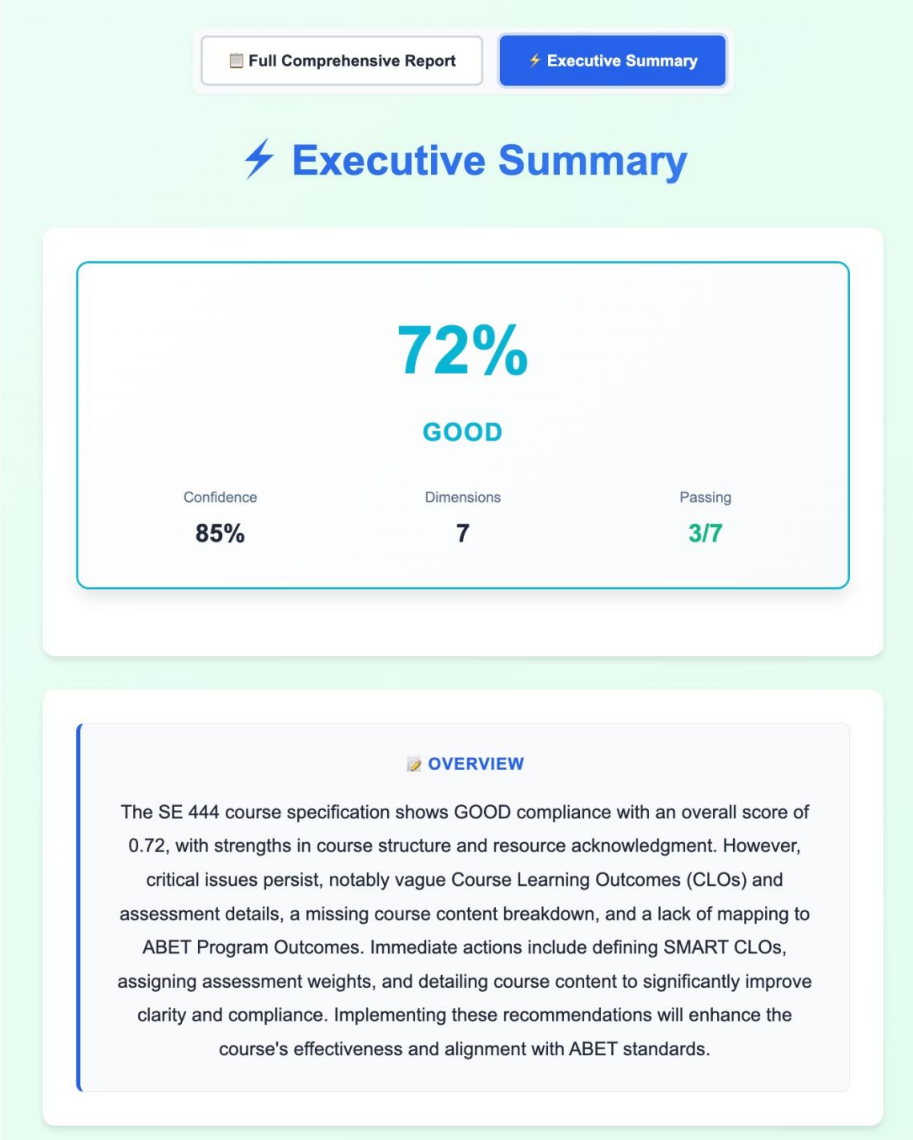
European Credit Transfer System

Auto

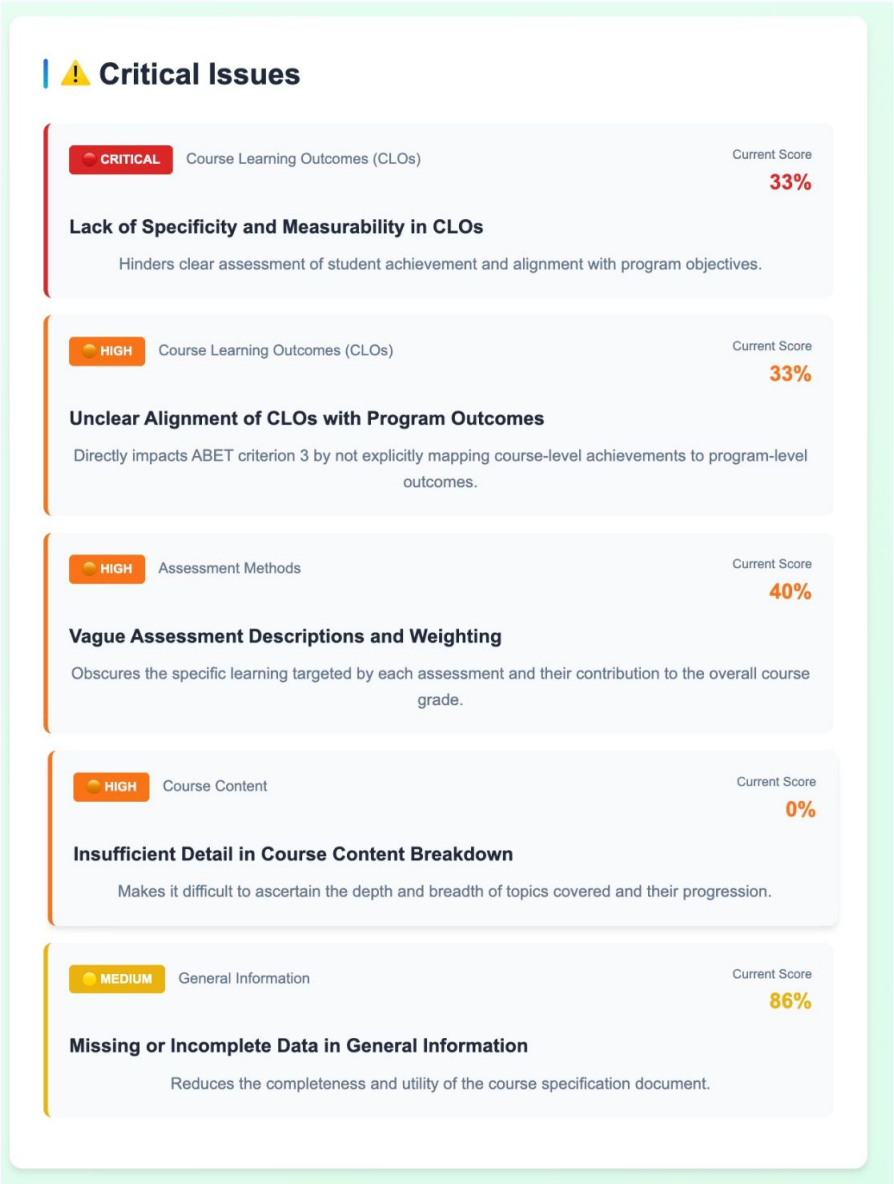
Automatic Standard Selection

Full Workflow Only

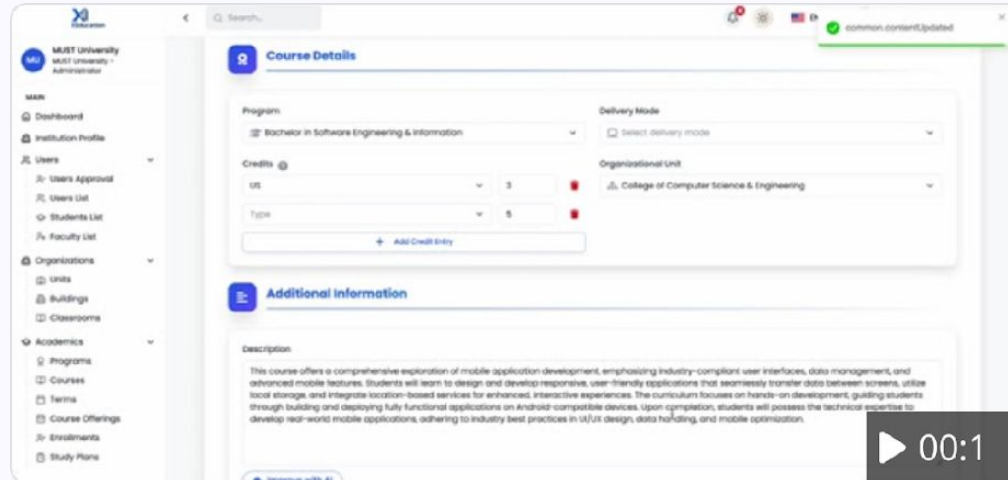
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تحسين مواصفات المقررات الدراسية بمساعدة الذكاء الاصطناعي



YouTube
XEducation Demo

الإشراف والمتابعة الدقيقة لمشاريع التخرج

Provide Feedback

4 Previous Feedback(s) Below

Feedback Type *

Proposal Review

Decision *

Approved

Comments & Feedback *

AI Enabled

AI Model

GPT-4o Mini (Fast & Efficient)

Choose the AI model for feedback generation

Generate with AI

Enhance with AI

Provide detailed feedback and recommendations

Edit

Preview

Overall Assessment:

The U-SCAR project presents a well-structured approach to addressing the challenges posed by UAVs in restricted airspaces through an innovative AI-powered multimodal detection and tracking system. The integration of various technologies and methodologies is commendable, yet the proposal would benefit from further clarity in certain areas to enhance its feasibility and impact.

Strengths:

- The project effectively identifies a significant security issue related to UAVs and proposes a comprehensive solution that combines both ground and aerial components.
- The use of advanced AI techniques, such as YOLOv11/YOLOv12 and CNN/LSTM models, demonstrates a strong foundation in current technological advancements, enhancing the project's potential effectiveness.
- The structured methodology, including a phased approach to development and validation, indicates a thorough understanding of the project lifecycle and the importance of iterative testing.

Areas for Improvement:

- The literature review section could be expanded to include a more detailed analysis of existing systems, particularly in terms of their limitations and how U-SCAR specifically addresses these gaps. This would strengthen the justification for the proposed approach.
- Clarification is needed regarding the integration of the various components (ground stations, tracking drones, and the dashboard). A more detailed description of how these elements will communicate and function together would enhance the project's coherence.
- The timeline for the project appears ambitious, particularly given the complexity of hardware development and AI model training. A more realistic timeline with milestones could help in managing expectations and ensuring timely progress.

Recommendations:

- Expand the literature review to include comparative analyses of similar systems, highlighting their shortcomings and explicitly stating how U-SCAR improves upon them. This could involve synthesizing findings from at least five recent studies.
- Develop a detailed integration plan that outlines the communication protocols and data flow

Quick Actions

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Supervision

Supervisor

Anis Koubaa

The data collection stage involves capturing vision and audio data through controlled flights, supplemented with public datasets (e.g., UAV123, Drone-Audio). Data will be preprocessed using tools such as Labelling for annotations and Librosa for feature extraction.

During AI model development, vision and acoustic datasets will be used to train and fine-tune detection, classification, and tracking models on Jetson devices, ensuring efficiency and accuracy.

Finally, integration and testing will combine multimodal outputs into a FastAPI backend with a PHP-based dashboard for real-time monitoring and alerts. Field trials will validate system performance under realistic conditions.

Provide Feedback

4 Previous Feedback(s) Below

Feedback Type *

Select feedback type

Decision *

Select decision

Comments & Feedback *

AI Enabled

AI Model

GPT-4o Mini (Fast & Efficient)

Choose the AI model for feedback generation

Generate with AI

Enhance with AI

Provide detailed feedback and recommendations

Edit

Preview

Provide detailed feedback and recommendations...

Rating (Optional)

Rate overall quality (1-5 stars)

Submit Feedback

Back to Projects

الإشراف والمتابعة الدقيقة لمشاريع التخرج

Provide Feedback

Feedback Type *

Proposal Review

Decision *

Approved

Comments & Feedback *

AI Enabled

AI Model

GPT-4o Mini (Fast & Efficient)

Choose the AI model for feedback generation

Generate with AI

Enhance with AI

Provide detailed feedback and recommendations

Edit

Preview

Quick Actions

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Manage Tasks

U-SCAR: Unified AI-Powered UAV Surveillance, Classification, and Response System

Back to Project

Project Supervisors

Add Co-Supervisor

Anis Koubaa

Main Supervisor

akoubaa@alfaisal.edu

Permissions: Full

H Task Title *

Enter a clear, descriptive task title

Task Description *

Describe the task in detail. Be specific about what needs to be accomplished, any requirements, and expected outcomes. (Minimum 50 characters for AI enhancement)

0 characters (minimum 50 for AI enhancement)

AI Enhancement Options

Enhancement Type

AI Model

Improve Clarity & Structure

GPT-4o Mini (Fast)

Improve Clarity & Structure

Priority Level

Assign To

Medium Priority

All Team Members

Project Tasks (1)

Make literature review

Actions

Medium Priority

IN PROGRESS

1 Comment

Last activity: Sep 3, 2025 2:23 PM

Project Context: U-SCAR: Unified AI-Powered UAV Surveillance, Classification, and Response System

Task Title: Conduct Literature Review

Priority Level: Medium

Task Description: You are required to search for several research papers on UAVs that focus on object detection using YOLO (You Only Look Once).

Created: Sep 3, 2025 2:12 PM

Due: Sep 17, 2025

Assigned to: Anis Koubaa

7

المجلس الأعلى للتعليم
الجامعة الإسلامية
بجامعة الملك سعود

ريفيويلوت (ReviewPilot)



Review
Pilot

Conference Management

Anis Koubaa

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Version 1.0.0



Review
Pilot

Chair

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AR



AK

Anis

The International Conference on Smart Systems and Emerging Technologies

Conference Approved 2 submissions ALECSO Headquarters | MUST University, Tunis, Tunisia

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Bidding

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Description

This academic conference focuses on cutting-edge research in computer science. The event aims to bring together researchers, practitioners, and industry professionals to share insights, present novel findings, and foster collaborations. Participants will have the opportunity to engage with the latest advancements in the field through presentations, discussions, and networking sessions.

Submission Link

Share this link for paper submissions

https://reviewpilot.org/events/af8305a4-0198-4293-a3b5-dd891f6d13b5/submit/

Copy

Authors can use this link to submit their papers to this event. Share this link on your event website or in your call for papers.

Event Website

<https://smarttech-conference.org/>

Event Details

Start Date

12/25/2025

End Date

12/27/2025

Submission Deadline

06/15/2025

Review Deadline

09/10/2025

Notification Date

09/15/2025

Event Chairs

AK

Anis Koubaa
akoubaa@alfaisal.edu

Chair

Submission Statistics

2 submissions









الجامعة العراقية
Ministry of Higher Education and Scientific Research
جامعة الموصل

مساعد رئيس الذكاء الاصطناعي: ReviewPilot

ReviewPilot AI Insights

✦ Submission Highlights

Problem Statement:

The rise of generative AI tools like ChatGPT in higher education has spurred the adoption of detection systems (Turnitin, Grammarly, ZeroGPT), yet their reliability and ethics face scrutiny, particularly concerning the boundaries between human authorship and AI assistance.

Gap Analysis:

Prior studies lack comparative empirical analysis in authentic academic contexts, and there's a gap between commercial claims and empirical reality regarding the accuracy of these detection tools.

Contribution:

This pilot study examines the reliability of leading AI detection tools (Turnitin, Grammarly, ZeroGPT) in identifying AI-assisted student work. It investigates the ethical implications, including demographic biases, privacy concerns, and erosion of trust. It advocates for AI literacy and human oversight over automated detection, proposing a framework for equitable AI integration in higher education assessment and policy.

Methodology:

A pilot study examined 16 essays (8 human-authored and 8 AI-assisted, minimally edited ChatGPT outputs) collected under controlled conditions at a Middle Eastern university. Three detection tools (Turnitin, Grammarly, and ZeroGPT) were used with a ≥50percent AI detection threshold.

Main Finding:

AI detection tools exhibit moderate but uneven accuracy (69–81percent), frequent inter-tool disagreement (31percent), and vulnerability to evasion via light edits. False positives flagged authentic work, while false negatives missed some AI-assisted texts. The study highlights the need for a triangulation approach, emphasizing that assessment design is more effective than technological policing.

📄 Relevance to the Event

Score:

★★★★★ 4/5

Justification:

The paper directly addresses the use of AI in education, a key theme of the conference. The analysis of AI detection tools, their limitations, and implications for academic integrity aligns with the conference's focus on AI innovation and the ethical considerations surrounding its use in various contexts. The study also touches upon fairness and equity, which relates to the overall theme of smart systems development.

🏷 Topics

Main Topic:

AI in Education

Secondary Topics:

Academic Integrity

Generative AI

AI Detection Tools

Bias and Fairness

Ethical Implications

Higher Education

🛡 Plagiarism Check

Plagiarism Score:

2%

70

Plagiarism Words

70

Identical Words

0

Similar Words

8

Sources

⚠ Potential Attacks Detected

• Zero-width space attack detected

Plagiarism Sources:

The accuracy-bias trade-offs in AI text detection tools and their impact on fairness in scholarly publication

1%

<https://peerj.com/articles/cs-2953/>

Plagiarism Words: 38

Testing the Reliability of AI Detectors: Having to Prove a Negative and Gaming AI Detectors | LAB Open

1%

<https://www.labopen.fi/en/lab-pro/testing-the-reliability-of-ai-detectors-having-to-prove-a-negative-and-gaming-ai-detectors/>

Plagiarism Words: 37

Scanned by: plagiarism • Scan Time: 9/26/2025, 2:13:36 PM

⚡ AI Content Detection

AI Likelihood Score:

0.03%

Human-like Score:

99.97%

Likely human-written

16.89

Readability Score

177

Sentence-level Analysis

⚠ Potential Attacks Detected

• Zero-width space attack detected

Sentence-level Analysis:

Show sentence details

Close

ReviewAnything reviewanything.ai



A. KOUBAA
Trial Account

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Review Paper
Your paper details

Configurations

AERO: AI-Enabled Remote Sensing Observation with Onboard Edge Computing in UAVs

Update Configurations

Section & AI ModelReview OptionsEnhance Options

Context

Unmanned aerial vehicles (UAVs) equipped with computer vision capabilities have been widely utilized in several remote sensing applications, such as precision agriculture, environmental monitoring, and surveillance. However, the commercial usage of these UAVs in such applications is mostly performed manually, with humans being responsible for data observation or offline processing after data collection due to the lack of on board AI on edge. Other technical methods rely on the cloud computation offloading of AI applications, where inference is conducted on video streams, which can be unscalable and infeasible due to remote cloud servers' limited connectivity and high latency. To overcome these issues, this paper presents a new approach to using edge computing in drones to enable the processing of extensive AI tasks onboard UAVs for remote sensing. We propose a cloud-edge hybrid system architecture where the edge is responsible for processing AI tasks and the cloud is responsible for data storage, manipulation, and visualization. We designed AERO, a UAV brain system with onboard AI capability using GPU-enabled edge devices. AERO is a novel multi-stage deep learning module that combines object detection (YOLOv4 and YOLOv7) and tracking (DeepSort) with TensorRT accelerators to capture objects of interest with high accuracy and transmit data to the cloud in real time without redundancy. AERO processes the detected objects over multiple consecutive frames to maximize detection accuracy. The experiments show a

ReviewEnhance

Generated ReviewEnhanced Text

Abstract

Score: 3.75

The abstract provides a clear problem statement and outlines the proposed solution effectively. However, it lacks a detailed gap analysis and could improve in conciseness. While the methodology is described, the quantitative findings are not emphasized sufficiently, which may hinder the reader's understanding of the study's significance.

Limitations

- Problem Statement: (Medium)** : The problem statement is present but could be articulated more clearly. It mentions the manual processing of data but does not explicitly state why this is a significant issue in the context of UAV applications, which could help frame the urgency of the research.
- Gap Analysis: (Major)** : The abstract does not adequately identify the specific gaps in existing literature that this research addresses. Highlighting the limitations of current UAV systems and how they fail to integrate AI effectively would strengthen the rationale for the proposed solution.
- Methodology: (Medium)** : While the methodology is described, it could be more succinctly presented. The details about AERO and its components could be streamlined to focus on the core aspects of the approach, making it easier for readers to grasp the methodology quickly.
- Quantitative Main Findings: (Medium)** : Although some quantitative results are provided, they are not emphasized effectively. Presenting these findings in a more prominent manner would enhance the abstract's impact and demonstrate the significance

Support

كشف المحتوى بالذكاء الاصطناعي: ReviewAnything

Review Paper
Your paper details

Configurations

Agentic UAVs: LLM-Driven Autonomy with Integrated Tool-Calling and Cognitive Reasoning

Update Configurations

Section & AI Model

Review Options

Enhance Options

Context

Unmanned Aerial Vehicles (UAVs) are increasingly deployed in defense, surveillance, and disaster response, yet most systems remain confined to SAE Level 2-3 autonomy. Their reliance on rule-based control and narrow AI restricts adaptability in dynamic, uncertain missions. Existing UAV frameworks lack context-aware reasoning, autonomous decision-making, and ecosystem-level integration; critically, none leverage Large Language Model (LLM) agents with tool-calling for real-time knowledge access. This paper introduces the Agentic UAVs framework, a five-layer architecture (Perception, Reasoning, Action, Integration, Learning) that augments UAVs with LLM-driven reasoning, database querying, and third-party system interaction. A ROS 2 and Gazebo-based prototype integrates YOLOv11 object detection with GPT-4 reasoning and local Gemma-3 deployment. In simulated search-and-rescue scenarios, agentic UAVs achieved higher detection confidence (0.79 vs. 0.72), improved person detection rates (91 percent vs. 75 percent), and markedly increased action recommendation (92 percent vs. 4.5 percent). These results confirm that modest computational overhead enables qualitatively new levels of autonomy and ecosystem integration. Unmanned Aerial Vehicles (UAVs) are rapidly transitioning from remotely piloted platforms to autonomous agents capable of performing increasingly complex tasks in logistics, agriculture, defense, and disaster response. This transformation parallels advances in artificial intelligence (AI), where

Review

AI Detection

Plagiarism

Generated Review

Enhanced Text

AI Detection

AI Detection Analysis

Likely AI-Generated

AI Detection Result: 3.11% human confidence. Likely AI-generated content with very_low confidence level.

Human Score

3.11%
Higher scores indicate human-written content

Confidence Level

VERY_LOW

Reliability of the analysis

29.67%

READABILITY

EN

LANGUAGE

4454

WORDS ANALYZED

Detailed Sentence Analysis

178 sentences

#1 Likely AI

8.01%

Unmanned Aerial Vehicles (UAVs) are increasingly deployed in defense, surveillance, and disaster response, yet most systems remain confined to SAE Level 2-3 autonomy.

Support

كشفت ReviewAnything: الانتحال

Agentic UAVs: LLM-Driven Autonomy with Integrated Tool-Calling and Cognitive Reasoning

Update Configurations

Section & AI ModelReview OptionsEnhance Options

Context

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Review

AI Detection

Plagiarism

Enhanced TextAI DetectionPlagiarism

Plagiarism Detection Analysis

High Plagiarism Risk

Plagiarism Detection: 89% similarity found. Potential plagiarism detected from 26 sources.

Plagiarism Score

89%

Percentage of potentially plagiarized content

Risk Level

HIGH

Overall plagiarism risk assessment

26

SOURCES

4168

PLAGIARIZED WORDS

4734

TOTAL WORDS

8908

CREDITS USED

Potential Sources

26 sources

#1

Agentic UAVs: LLM-Driven Autonomy with Integrated Tool-Calling and Cognitive Reasoning

85%

<https://arxiv.org/html/2509.13352v1>

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#2

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