


Presented  
by

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# Authenticity Assessment A Case Study - Utilising ChatGPT for Offence Cyber Security

Any Final Questions!  
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Digitally Enhanced Education Webinar:  
Teaching with ChatGPT: Examples of  
Practice

# Overviews

Context

Rethinking Assessment

- KSA Framework

Case Study – Ethical Hacking

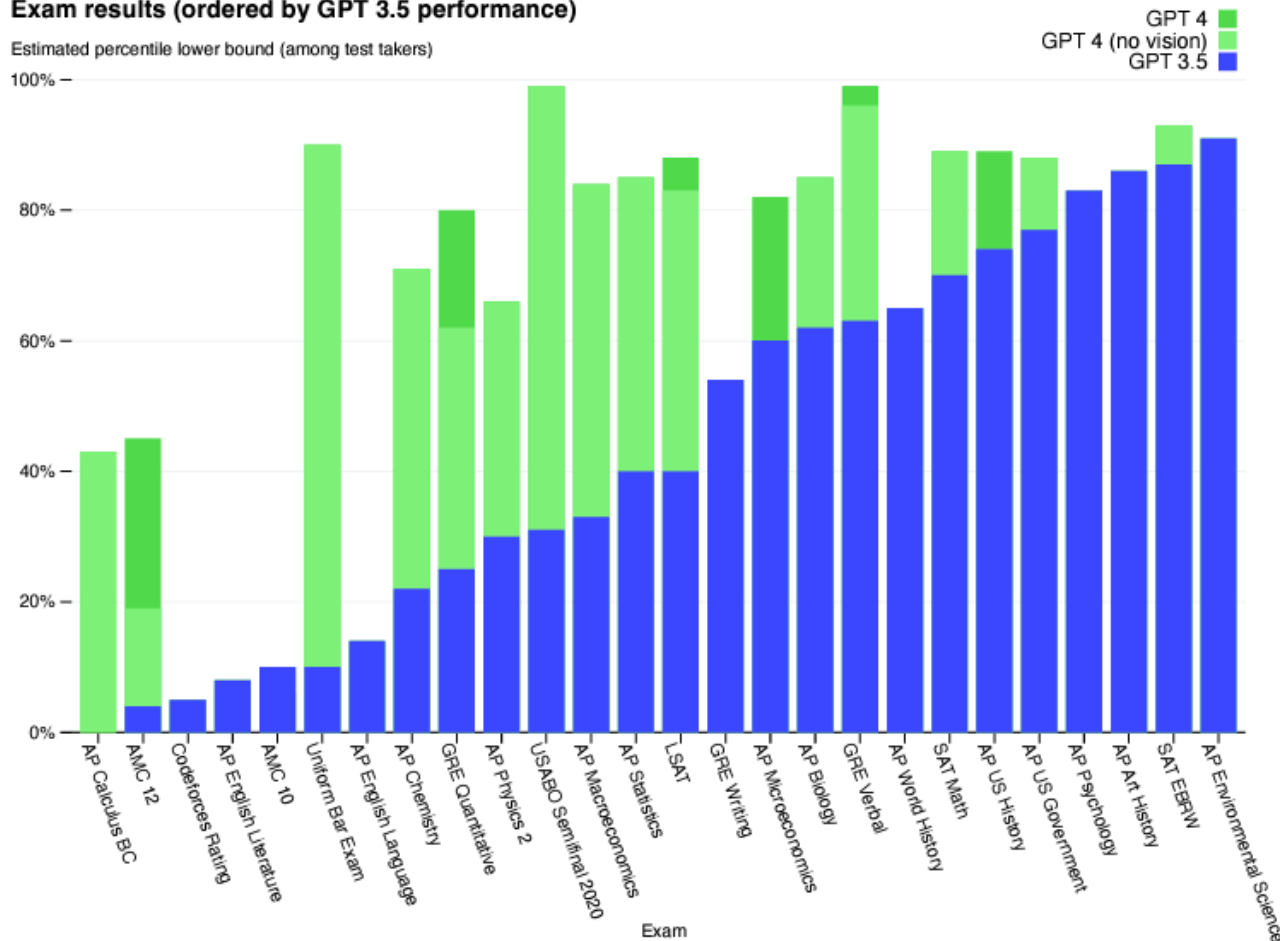
# Context

Ethical Hacking

Breaking into  
systems- legally

### Exam results (ordered by GPT 3.5 performance)

Estimated percentile lower bound (among test takers)



**Figure 4.** GPT performance on academic and professional exams. In each case, we simulate the conditions and scoring of the real exam. Exams are ordered from low to high based on GPT-3.5 performance. GPT-4 outperforms GPT-3.5 on most exams tested. To be conservative we report the lower end of the range of percentiles, but this creates some artifacts on the AP exams which have very wide scoring bins. For example although GPT-4 attains the highest possible score on AP Biology (5/5), this is only shown in the plot as 85th percentile because 15 percent of test-takers achieve that score.

# Rethinking Assessments

## Revert

Go back to the old system

- Unseen exam
- Verbal assessments etc.

## Outrun

Design assessment that cannot be answered by AI tools

- Using specifics in class resources
- Scenarios etc.

## Embrace

Use AI as the bases to allow students engage in assessment

Use ChatGPT to Support Assessments Process

Solidify knowledge

# Outrun

## Cases Study

Based on either a real or simulated case study  
with context  
Require answered to be contextualised

## Provide examples during sessions

Based on context of a practical work

# KSA Framework



## Knowledge

Ask questions and  
critique its limitations  
Complement basic  
knowledge



## Skills

Explore limitations via  
critical thinking



## Ability

Explore the limitations  
and improve and  
incorporate into a wider  
concept

# Equilibrium – Authentic Assessment

Copy and  
paste from  
ChatGPT

Ask key  
terms and  
draft work

Critique  
output

Authentic  
peace -  
KSA

Academic Dishonesty

Academic Learning



# Case Study

Penetration  
Testing – ethical  
hacking

- Basic skills and tools in sessions

Incorporate  
ChatGPT with real  
company

- Expand knowledge and critical thinking

Live company via  
Bug bounty

- Skills

Pecha Kucha  
presentation

- Test ability and understanding

# Conclusion



Limitations of  
GPT models.

It still is **not fully reliable** (it “hallucinates” facts and makes reasoning errors).



Appropriate use of KSA can  
address the problem and  
improve quality of education

Any Final Questions!

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