



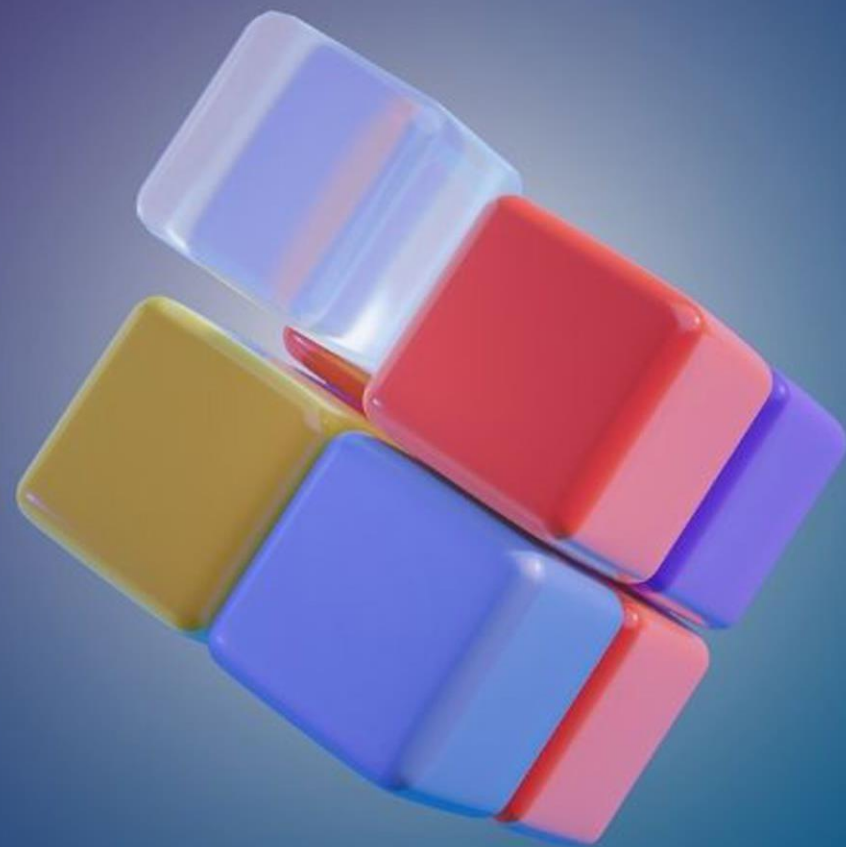
# UHR Conference 2025

Online 13 - 15 May

#UHR25

#UHRawards25

#workwithUHR





Leeds Trinity  
University

# **An AI Adventure: Harnessing Artificial Intelligence for Job Evaluation**

14<sup>th</sup> May 2025

# Why we started this journey

## Goal

See how AI could make job evaluation faster, fairer, and less manual in HE — and beyond.

## What We Hoped For

- Fair, consistent results
- Faster evaluations
- Free up HR to focus on people, not paperwork

## What Stood in the Way

- Getting funding for innovation
- Navigating Intellectual Property and data concerns



*“Research is an adventure”* –  
Professor Yanguo Jing

Dean of the Faculty of  
Business, Computing and  
Digital Industries





# The Power of Collaboration





# The Power of Collaboration





# The Power of Collaboration





# The Power of Collaboration





# The Power of Collaboration





# Why did the collaboration work?

## 1. Alignment of values



# Why did the collaboration work?

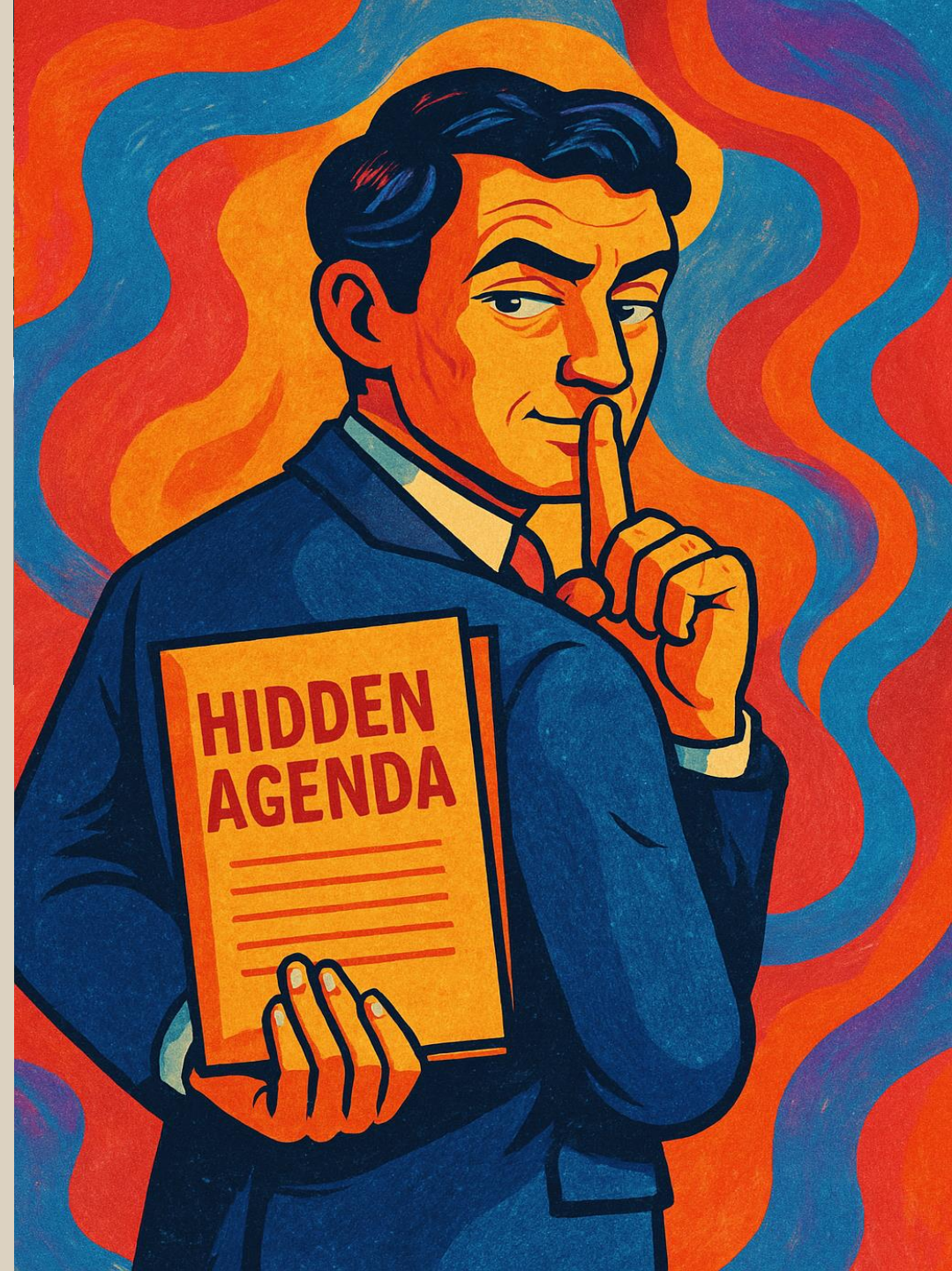
1. Alignment of values
2. Identified and dealt with concerns





# Why did the collaboration work?

1. Alignment of values
2. Identified and dealt with concerns
3. No hidden agendas



# How we built the LTU BOT

## User friendly platform

Built a simple web tool to interact with the AI

## Smart data

Collected and labelled 126 job descriptions using HERA element

## AI training

Used ChatGPT to learn how to match descriptions to evaluation criteria

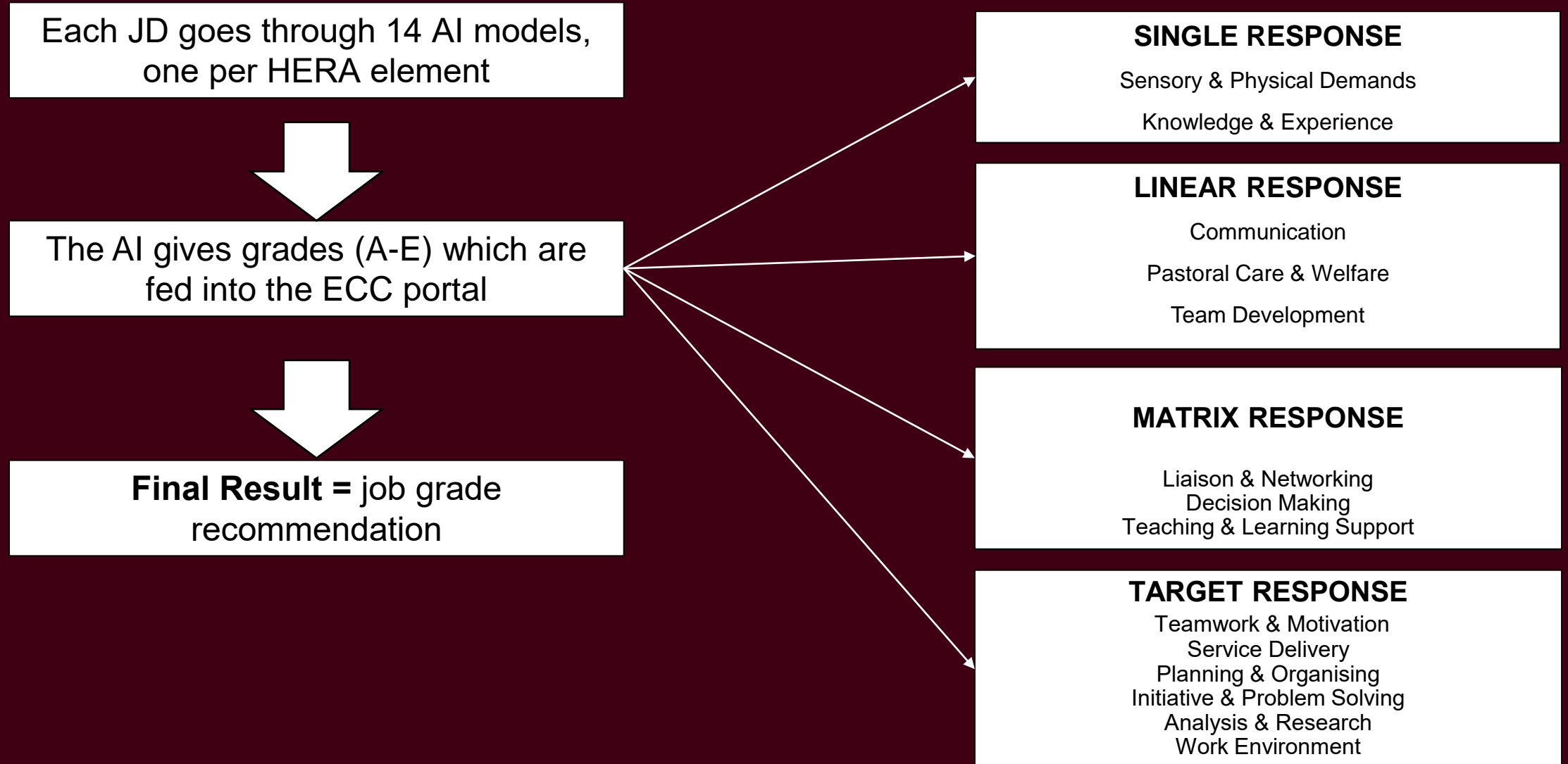
## Live Demo

Created a working prototype to showcase the tool's potential





# How AI evaluates jobs



# Demo

The image is a composite of two screenshots. The left screenshot shows a web browser window with the URL <https://app.ecc...>. The page header includes the HERA logo and a user profile for 'Nosakhare Omokaro'. The main content area is titled 'Team Development' and 'Teaching And Learning Support'. It contains a question (46) about role holder requirements with four multiple-choice options (A, B, C, D). The right screenshot shows a Jupyter Notebook titled 'Maxwell-Text Classification'. The notebook has several tabs: 'linear\_team\_development.ipynb', 'linear\_sensory.ipynb', 'linear\_communication.ipynb', and 'linear\_pa...'. The active tab is 'linear\_team\_development.ipynb', which displays a table of accuracy metrics for a linear model. The table shows accuracy, macro avg, and weighted avg for three different models. Below the table, it states 'Accuracy: 0.7857142857142857' and 'Predicted labels for the new job description: Question 43: Response B, Question 44: Response B, Question 45: Response B, Models saved successfully!'. The notebook also shows a code cell with a function definition for 'predict\_new\_job\_description' and its output, which is '0.0s'.

**HERA Application Interface:**

Team Development ✓

Teaching And Learning Support ?

IS THE ROLE HOLDER REQUIRED TO:

46 introduce students or others who are new to the area to standard information or procedures?

A develop innovative approaches to the learning experience and the curriculum; originate content and methodology?

B design content or learning materials within existing frameworks; make appropriate modifications to existing materials on the basis of the knowledge or experience of the learner(s)?

C provide standard information or deliver teaching or training?

D use of other materials are relevant?

47 teach or train students or others on specific tasks, issues or activities; assess performance and provide feedback during the event?

A develop B design C provide D use

03:23

**Jupyter Notebook: Maxwell-Text Classification**

linear\_team\_development.ipynb • linear\_sensory.ipynb • linear\_communication.ipynb • linear\_pa...

Linear Response > linear\_team\_development.ipynb > empty cell

+ Code + Markdown | ▶ Run All ⌂ Restart ≡ Clear All Outputs ...

spacy\_kernel (Python 3.12.3)

accuracy			0.79	42
macro avg	0.77	0.74	0.75	42
weighted avg	0.78	0.79	0.78	42

Accuracy: 0.7857142857142857

Predicted labels for the new job description:

Question 43: Response B

Question 44: Response B

Question 45: Response B

Models saved successfully!

```
[ ]
```

```
# Example usage with a new job description snippet
new_job_desc = """

Web Services Manager JD July 2021
JOB TITLE: DEPARTMENT: GRADE: HOURS OF WORK: RESPONSIBLE TO: RESPONSIBLE FOR: PURPOSE OF POST:

"""

predict_new_job_description(new_job_desc)
```

```
[3] ✓ 0.0s
```

... Predicted labels for the new job description:

Question 43: Response A

Question 44: Response A

Question 45: Response A



# Demo (Cont.)

Dashboard

Role Search

Reports

Support

Labour Market Data

People Details

System Customisations

HERA

Higher Education Role Analysis

NO

Nosakhare Omokaro | Standard | Leeds Trinity AI Pro

Last Login 17/04/2025, 16:05:17

COMMUNICATION	57 / 80	71	7
TEAMWORK AND MOTIVATION	37 / 70	53	9
LIAISON AND NETWORKING	38 / 65	58	8
SERVICE DELIVERY	24 / 70	34	12
DECISION MAKING PROCESSES AND OUTCOMES	53 / 70	76	6
PLANNING AND ORGANISING RESOURCES	9 / 70	13	14
INITIATIVE AND PROBLEM SOLVING	80 / 80	100	1
ANALYSIS AND RESEARCH	25 / 70	36	11
SENSORY AND PHYSICAL DEMANDS	18 / 50	36	10
WORK ENVIRONMENT	65 / 65	100	1
PASTORAL CARE AND WELFARE	57 / 65	88	4
TEAM DEVELOPMENT	70 / 70	100	1
TEACHING AND LEARNING SUPPORT	26 / 95	27	13
KNOWLEDGE AND EXPERIENCE	65 / 80	81	5
TOTAL POINTS:	ORIGINAL: 624		



Support

Labour Market Data

People Details

System Customisations

W

Role Name

Web Service Manager

AUTHORISE SCORE

Role Code

000006

Total Points

624

Score Date

17/04/2025

Current Grade

Grading





# Is the AI getting it right?

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We tested the AI on 50 job descriptions.

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Compared its answers to expert evaluations for all 14 HERA elements.

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**Result:** Accuracy exceeded 70% — a solid benchmark for real-world use.

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A strong foundation for expanding to other roles and sectors.



# Evaluation of the project

- Establish the ongoing human input required with access to the BOT
- Elimination of bias in the job evaluation process through application of the BOT
- Replication of the AI tool to be used by other organisations
- Enhance the learning experience and employability for students
- Dissemination of knowledge and learning gained from the pilot





# What we learned

- AI can boost efficiency — saving time and freeing HR for higher-value work.
- Accuracy matched industry standards across all job elements.
- Cross-team collaboration (HR, AI experts, and students) led to real innovation.
- The pilot laid strong foundations, with room to grow through more data and refinement.



*“AI will not replace HR, but HR using AI will thrive”*

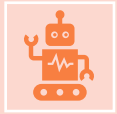


# Potential next steps



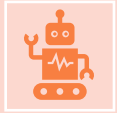
Train the LTU BOT

Improve accuracy  
Eliminate bias further



Create and train another  
HE BOT

To prove can be used across the  
sector



Create and train another  
sector BOT

To prove AI can be used on  
different job evaluation  
methodology



Commercialisation of the  
product

Product available as a  
viable solution





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