

## Lead AI Engineer

**Salary: £50,364 - £53,982 per annum (Grade 11)**

**Contract type: Full-time (36.5 hours per week), Permanent**

### The challenge

At WJEC, we contribute to our education communities by providing trusted qualifications and specialist support, to allow our learners the opportunity to reach their full potential. This is a fantastic chance to be part of an organisation that both encourages and enhances the minds of tomorrow.

### The role

The Lead AI Engineer is responsible for the design, development, and deployment of AI solutions across the organisation, ensuring AI technologies deliver innovation, efficiency, and value in both assessment and resource development. They will support development lifecycle of AI-related use cases, leading the technical design and implementation to ensure solutions are robust, ethical, and aligned with organisational strategy.

They will establish and maintain coding standards, model development processes, and best practices for AI, managing a small team of AI developers, providing technical leadership and mentoring along the way. This is an exciting role which will help to keep the organisation at the forefront of AI innovation by researching and applying emerging technologies in practical, scalable ways.

### About you

Technically, the right candidate will have strong coding skills in TypeScript and REACT; and experience with AI/ML frameworks (e.g. TensorFlow, PyTorch, Hugging Face) and a deep understanding of MLOps, cloud-based AI services (AWS, Azure, GCP), and deployment pipelines. Candidates should have some experience developing AI-powered applications or solutions and be comfortable coaching/mentoring others in these new technologies. Fundamentally, candidates must be able to demonstrate their commitment to ethical and responsible AI development.

### Benefits

At WJEC, we are proud to be a flexible and inclusive place to work. We offer a range of excellent benefits including: 25 days annual leave together with 16 days statutory and additional holidays (adjusted for part-time and compressed working patterns), free Welsh language courses, a generous pension scheme and numerous family friendly policies.

We operate a hybrid working model, enabling the successful candidate to split their time between WJEC offices and working at home, subject to business need. As such, applications are invited from individuals across the UK but please note that regular working from our Cardiff offices will be required – whilst flexibility can be discussed, this team currently attend the office, on average, once per week.

If you would like to know more about this role, or about working at WJEC, please do not hesitate to contact our HR team ([HR@wjec.co.uk](mailto:HR@wjec.co.uk)), who will be more than happy to help.

**Closing date: 23:59, Sunday 16 November 2025**

## JOB DESCRIPTION

|                             |                                    |
|-----------------------------|------------------------------------|
| <b>Job Title:</b>           | Lead AI Engineer                   |
| <b>Department:</b>          | Digital and Transformation         |
| <b>Section:</b>             | Educational Resources              |
| <b>Responsible to:</b>      | Head of Product and AI Development |
| <b>Grade:</b>               |                                    |
| <b>Location:</b>            | Western Avenue                     |
| <b>Main Purpose of Job:</b> |                                    |

The Lead AI Engineer is responsible for the design, development, and deployment of AI solutions across the organisation, ensuring AI technologies deliver innovation, efficiency, and value in both assessment and resource development. They will support the Product Owner in managing the development lifecycle of AI-related use cases, leading the technical design and implementation to ensure solutions are robust, ethical, and aligned with organisational strategy.

They will establish and maintain coding standards, model development processes, and best practices for AI, managing a small team of AI developers, providing technical leadership and mentoring along the way. This is an exciting role which will help to keep the organisation at the forefront of AI innovation by researching and applying emerging technologies in practical, scalable ways.

## Principal Duties and Responsibilities:

### Technical Leadership

- Lead the end-to-end development of AI models and systems, including prototyping, training, deployment, and monitoring.
- Provide expert technical advice to the Head of Product and AI Development, senior management, and project stakeholders.
- Establish coding, testing, and deployment standards for AI projects, ensuring reproducibility, scalability, and security.
- Maintain organisational AI code libraries, APIs, and reusable tools.
- Ensure integration of AI systems with wider digital platforms and services.

### Team Leadership

- Line-manage AI developers, ensuring they are motivated, skilled, and delivering effectively.
- Plan, organise and delegate work, monitoring capacity, workloads and project progress; intervening if required.
- To support the induction, training and continuous professional development of the team, mentoring others in AI frameworks, MLO (Machine Learning Operations) practices, and best practices in machine learning and data science.

- To support and guide team member(s) in welfare issues, escalating as necessary to specialist support areas.
- Promote a collaborative, innovative culture within the team, encouraging experimentation while maintaining discipline in governance.

### **AI Governance & Ethics**

- Work with the Head of Product and AI Development to embed governance into AI projects, including bias mitigation, explainability, and regulatory compliance.
- Ensure audit trails, documentation, and monitoring are in place for all AI systems.
- Ensure AI solutions meet organisational and sector-wide standards for fairness, accountability, and transparency.

### **Project Delivery**

- Lead the technical development of AI use cases across the organisation—including assessment (e.g. automated marking, fraud detection), resources (e.g. adaptive learning, content generation), and operations (e.g. predictive analytics, customer service tools)—ensuring solutions meet product requirements and are delivered to a high standard.
- Collaborate with the Product Owner and technical stakeholders to refine requirements, estimate effort, and deliver high-quality AI solutions.
- Translate product priorities into detailed technical plans, defining milestones, allocating resources, and ensuring timely delivery.
- Track project progress, identifying risks and escalating where necessary.
- Conduct lessons-learned reviews at the conclusion of each project.

### **Innovation & Research**

- Proactively research emerging AI technologies (e.g. generative AI, NLP, computer vision, recommender systems) and explore their application in education and assessment.
- Build proof-of-concepts and pilot projects to evaluate potential value.
- Collaborate with external AI partners, research bodies, and universities to extend organisational expertise.
- Encourage iterative, agile approaches within the team.

### **Other**

- To understand and comply with all WJEC policies and procedures detailed in the Staff Handbook; in particular, ensuring you understand your role and responsibilities in relation to Safeguarding, Information Security, GDPR, Confidentiality, Welsh language and Health, Safety and Environment.
- Participate actively in supporting the principles and practice of equality of opportunity as laid down in WJEC's Equality & Diversity Policy, embedding ED&I into all projects, policies and practices.
- To be a pro-active team-member, contributing positively to meetings and projects in support of WJEC aims and objectives.
- To engage in personal and professional development activities relevant to the role.
- To undertake other duties, as required, which are commensurate with the grade of the post.

## Person Specification

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|--------------------|----------------------------------------------------|
| <b>Job Title:</b>  | Lead AI Engineer                                   |
| <b>Department:</b> | Digital and Transformation – Educational Resources |

Highly Desirable criteria are the optimum skills and experience the applicant will ideally have, but it is not expected that candidates will meet all of them. Desirable criteria are those which would add value to the job if present, and also include potential for growth and development into the role.

## Skills and Abilities

### Highly desirable

- Strong coding skills in TypeScript and REACT; and experience with AI/ML frameworks (e.g. TensorFlow, PyTorch, Hugging Face).
- Ability to design and deliver AI solutions at scale.
- Excellent diagnostic and problem-solving skills, seeking innovative solutions to complex problems.
- Self-driven and very organised with an ability to independently manage conflicting deadlines and respond to changing demands effectively.
- Ability to lead and mentor a team of developers.
- Excellent communication, interpersonal and presentational skills, with the ability to explain technical AI concepts to a variety of audiences across a range of medium.

### Desirable

- Ability to communicate through the medium of Welsh or willingness to learn.

## Knowledge

### Highly desirable

- Detailed understanding of MLOps, cloud-based AI services (AWS, Azure, GCP), and deployment pipelines.
- In-depth knowledge of machine learning, natural language processing, deep learning, and generative AI.
- Understanding of AI governance, ethics, and regulatory requirements (e.g. GDPR, UK/EU AI Act).
- Knowledge of integrating AI into enterprise IT systems.

### Desirable

- Familiarity with data science principles, data pipelines, and database technologies.
- Awareness of the education and assessment sector and the opportunities for AI within it.

## Experience

### Highly desirable

- Experience in one or more of the following:
  - Delivering AI-powered applications or solutions.
  - Managing teams and AI projects to successful delivery.
  - Implementing AI governance and compliance practices.
  - Training or mentoring colleagues in AI technologies.
- Track record of applying AI in commercial or educational settings.

### Desirable

- Experience of working with open-source AI communities or research partnerships.
- Experience in regulated industries where compliance and governance are critical.

## Training / Qualifications

### Highly desirable

- Degree (or equivalent qualification/experience) in Computer Science, AI, Data Science, or a related field.

### Desirable

- Postgraduate qualification in AI/ML.
- Project Management qualification.

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**Other**

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**Essential**

- Commitment to ethical and responsible AI development.

Telerau ac Amodau Gwasanaeth / Terms and Conditions of Service

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|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----|
| Teitl y Swydd /<br>Job Title:         | Peiriannydd AI Arweiniol / Lead AI Engineer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |    |
| Cyflog /<br>Salary:                   | £50,364 - £53,982 y flwyddyn (pro-rata lle y bo'n gymwys)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gradd /<br>Grade: | 11 |
| Gwyliau Blynnyddol /<br>Annual Leave: | <p>25 diwrnod (182.5 awr) y flwyddyn. Mae CBAC hefyd yn darparu 16 diwrnod (116.8 awr) i gyfrif am Wyliau Cyhoeddus a chyfnodau Cau CBAC (gwyliau ychwanegol). Mae'r lwfansau hyn yn cael eu haddasu ar gyfer staff sy'n gweithio'n rhan-amser neu batrymau gweithio cywasgedig.</p> <p>25 days (182.5 hours) per annum. WJEC also provides 16 days (116.8 hours) to account for Bank Holidays and WJEC Closure periods (Additional leave). These allowances are adjusted for staff who work part-time or compressed working patterns.</p> |                   |    |
| Pensiwn /<br>Pension:                 | <p>Mae gofynion y Cynllun Pensiwn Llywodraeth Leol yn berthnasol.</p> <p>The provision of the Local Government Pension Scheme (LGPS) applies.</p>                                                                                                                                                                                                                                                                                                                                                                                          |                   |    |

Math o Gytundeb / Contract Type:

|                                                             |                                                                                                                    |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Oriau Gwaith / Working Hours:                               | Hyd y Contract / Length of Contract:                                                                               |
| <input checked="" type="checkbox"/> Llawn-amser / Full-time | <input checked="" type="checkbox"/> Parhaol / Permanent                                                            |
| <input type="checkbox"/> Rhan-amser / Part-time             | <input type="checkbox"/> Tymor penodol / Fixed-term                                                                |
| Nifer yr oriau yr wythnos /<br>No. of hrs per week: 36.5    | Dyddiad gorffen arfaethedig /<br>Planned end date:<br><br>Rheswm dros y cyfnod penodol /<br>Reason for fixed-term: |

Arall / Other:

|                                                    |            |
|----------------------------------------------------|------------|
| Cyfnodau prysur llwyth gwaith /<br>Workload Peaks: | Amh<br>N/A |
|----------------------------------------------------|------------|

Dull Ymgeisio / Method of Application:

Dylid anfon ffurflenni wedi'u llenwi ar e-bost at [AD@cbac.co.uk](mailto:AD@cbac.co.uk) erbyn 23:59, dydd Sul 16 Tachwedd 2025.

Completed forms should be sent by email to [HR@wjec.co.uk](mailto:HR@wjec.co.uk) by 23:59, Sunday 16 November 2025.