



KTP Associate (Computer Vision & Machine Learning Specialist)

Job Summary

This is an exciting opportunity for an ambitious Computer Vision & Machine Learning Specialist to fast-track their career development as a Knowledge Transfer Partnership (KTP) Associate, utilising expertise in Machine Vision and Machine Learning, with a particular focus on Deep Learning and Modern AI Frameworks. You will undertake a 36-month collaborative project between AISUS <https://www.aisus.co.uk/> and Robert Gordon University (School of Computing, Engineering and Technology), jointly funded by Innovate UK and AISUS Offshore Limited. The post will be based at the company's premises in Aberdeen. As a Computer Vision & Machine Learning Specialist, you will be responsible for developing a time-aware asset management and inspection solution that transforms complex inspection and operational data into actionable insights. The solution will predict asset degradation and remaining useful life, enabling proactive maintenance, optimising inspections, extending asset life, reducing unplanned downtime, and minimising material and operational waste to support safer, more efficient industrial operations.

AISUS specialise in offshore inspection services, pioneering new advanced inspection technology for the global energy industry. With a team of expert professionals and a deep understanding of offshore inspections, AISUS deliver high-quality services and support to their clients.

You will receive extensive practical and formal training, gain marketable skills, broaden your knowledge and expertise within an industrially relevant project, and gain valuable experience from industrial and academic mentors. You will also benefit from a Personal Development Budget of £6,000.

You must hold at least a First-Class Honours degree in Computing, Computer Vision, Machine Learning, Artificial Intelligence, or a closely related discipline. A postgraduate qualification, such as an MSc or PhD in a relevant field, would be highly desirable. You will be self-motivated, able to work independently and effectively within a small, dynamic team, and capable of delivering high-quality work to tight deadlines. You should demonstrate a

genuine enthusiasm for applying advanced AI and machine learning methods to challenging real-world problems. Strong programming skills, particularly in Python, are essential. You must have practical experience with modern deep learning frameworks, such as PyTorch, together with strong applied knowledge of computer vision, machine learning and deep learning.

Excellent communication and interpersonal skills are required, as you must be able to communicate effectively with a range of different individuals. i.e., technical, academic, business and customers. Team working and flexibility will be a key requirement. You must be innovative, driven and willing to learn new skills.

Informal enquires may be sent to: Prof Eyad Elyan e.elyan@rgu.ac.uk or the company supervisor Mr. Graeme McNay gm@valor-group.co.uk

To apply, please submit your CV along with a cover letter detailing how you meet the requirements of the role, as set out in the person specification.

Sponsorship is not available for this role but we will consider eligibility under the Global Talent visa.

Job Description

RESPONSIBLE TO Whilst working on company premises report to and take direction from company supervisor. Whilst working at Robert Gordon University report to and take direction from academic line manager

RESPONSIBLE FOR: No supervisory responsibilities

PURPOSE OF POST:

- Transfer knowledge and expertise in Computer Vision and state-of-the-art Machine Learning, with particular emphasis on AI-driven predictive maintenance, to AISUS Offshore Limited.
- Take a leading role in developing methods for the exploration, visualisation, pre-processing and management of large-scale, complex multimodal inspection datasets.
- Develop scalable, time-aware data pipelines for offshore assets, integrating multimodal inspection and operational data into a continuously evolving digital repository.
- Explore and develop advanced data representation and feature-learning methods to identify patterns of asset degradation and capture the progression of failure mechanisms over time.

- Implement, evaluate and benchmark advanced temporal AI methods, including state-of-the-art transformer-based sequence models, to predict time-to-failure and remaining useful life (RUL), with quantified uncertainty to support risk-based decision-making.
- Develop the technical, communication and professional skills required to take on increasing levels of responsibility throughout the project

PRINCIPAL DUTIES:

- Deliver the project objectives as detailed in the KTP project workplan.
- Maintain an up-to-date project plan and provide regular progress reports.
- Deliver presentations to immediate project team members and other stakeholders.
- Any other duties that maybe reasonable, assigned by the Academic Supervisor/ Company Supervisory teams.

Person Specification

ESSENTIAL REQUIREMENTS

Qualifications and Professional Memberships:

First-Class Honours degree in Computing, Computer Vision, Machine Learning, Artificial Intelligence, or a closely related discipline

Knowledge and Experience:

- Strong knowledge of data exploration, cleaning and pre-processing
- Strong knowledge of machine learning, deep learning, and applied computer vision.
- Strong knowledge and understanding of programming languages (e.g., Python)
- Strong knowledge of modern deep learning frameworks such as PyTorch or similar and other vision libraries such as OpenCV
- Technical experience in designing, developing, and evaluating data-driven solutions using machine learning and/or deep learning frameworks

DESIRABLE REQUIREMENTS

Qualifications and Professional Memberships:

Postgraduate or a PhD degree in Computer Vision, Machine Learning or similar field.

Knowledge and Experience:

- Knowledge of Deep Sequence Models and Time Series Analysis is highly desirable.
- Experience of deploying AI-based solutions locally or on the cloud
- Experience of cloud systems such as AWS, AZURE or similar platforms
- Experience in the Oil and Gas sector, inspection industry or asset management
- Experience with transformer-based architectures and modern AI methods would be highly desirable

Salary: 40000.00 - 45000.00 GBP per Year

Position Type: Full Time , Fixed Term 36 Month 35.0 Hours per Week