

Requisition Number: 23042

Job Description.

HORIBA MIRA is a world-class, independent engineering consultancy, operating in multiple locations around the world, to support vehicle manufacturers and their supply chain with cutting-edge engineering and testing expertise

We are seeking an AI Software Engineer to join a small, fast-moving team working to create advanced robot prototypes and products. For the right candidate, we offer an opportunity to help set the agenda and organize the development of perception-aided autonomy.

The ideal candidate has experience in hands-on neural network vision based perception research and development and is comfortable integrating results into motion planning algorithms. Examples of excellent practical experience include semantic segmentation, object detection and tracking, model building, and experience enabling robot navigation in complex real-world environments.

The candidate is expected to write software, conduct experiments, communicate results and develop innovative solutions to new problems. We offer a relaxed but hardworking environment where individuals are recognised for their personal performance .

Please note; remote working is available with this position (typically 2-3 days in the office - subject to current working review) and dependant on project requirements.

Title of Job:	AI Software Engineer		
Department:	UGV		
Grade:	Up to BB5 (Depending on Skills & Experience)		
Date Required:	ASAP		
Salary Range:	Competitive (Depending on Skills & Experience)		
Number Required:	Two (2)		
Location:	Nuneaton		
Reason for Vacancy:	New job role to develop and deliver AI capability and services		
Contract Type:	Permanent:	Permanent	Contractor:
Responsible To:	UGV Software Team Leader		
Subordinates:	None		

Main Purpose of Job

- Collaborative design and training of neural networks capable of making accurate observations about the observed scene in uncertain, dynamic environments.
- Develop vision based perception systems
- Support prototyping of autonomous systems and validate designs through a series of purpose-designed experiments .
- Document work and assist with the transition of new capabilities, technologies, and prototypes into a product development environment.
- Support establishing HORIBA MIRA as the technical partner of choice for the development of autonomous off-highway technologies.

Key Technical Skills

Essential

- First class neural network design and training with PyTorch .
- First class Python programming experience.
- Excellent problem solving and communications skills.
- Agile development experience with Kanban or Scrum.
- Comfortable using Linux.

Desirable

- C++ programming experience.
- Simulations using Unreal Engine 4.
- Experience deploying to Nvidia Jetson based products.

Essential Qualifications	Preferred Qualifications
<ul style="list-style-type: none"> • A relevant engineering, science degree or equivalent. 	<ul style="list-style-type: none"> • Post graduate qualification in Software Engineering or Computer Science. • Chartered status and member of a recognised professional institution.

Essential Experience	Preferred Experience
<ul style="list-style-type: none"> • Worked as part of a team creating neural network based solutions with PyTorch or similar. 	<ul style="list-style-type: none"> • A senior member of a team designing neural network based solutions to deliver a perception based real-world product. • First class practitioner in neural network design and application with PyTorch.

What is the candidate likely to be doing now?
<ul style="list-style-type: none"> • Development of neural networking solutions for a range of applications.

Other information
<ul style="list-style-type: none"> • Must be self-motivated, capable of working independently, innovative, demonstrable track record of delivery.