Requisition Number:	22884

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 a User Interface 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 our User Interfaces.

The ideal candidate has experience leading and participating in User Interface design and implementation. Examples of excellent practical experience includes desktop and mobile User Interfaces, for controlling Autonomous Vehicles and Robots, providing an intuitive and enjoyable user experience.

The team's engineers write software, conduct experiments, communicate results, give high-profile demonstrations and develop innovative solutions to new problems. We offer a relaxed but hardworking environment where individuals are recognised for their personal performance.

Title of Job:	User Interface Software Engineer			
Department:	UGV			
Grade:	Up to BB4 (Depending on Skills & Experience)			
Date Required:	ASAP			
Salary Range:	Up to £55K			
Number Required:	One (1)			
Location:	Nuneaton			
Reason for Vacancy:	New job role to design and implement UI for controlling Autonomous Unmanned Ground Vehicles and Robots			
Contract Type:	**Permanent:**	Permanent	**Contractor:**	
Responsible To:	UGV Autonomy Team Leader			
Subordinates:	None			

Main Purpose of Job

- Own the design of User Interfaces for all aspects of our autonomous systems, such as system setup, mission planning, operator control, sensor visualisation, etc.
- Responsible for the implementation / coding of our User Interfaces.
- Illustrating User Interface elements such as button s, map imagery and markers, vehicle telemetry feedback and graphs, sensor visualisation , low latency video streaming, etc.
- Interacting with vehicle systems over low latency and reliable communications networks.
- Working with larger user interfaces for desktop/laptop usage and smaller user interfaces for portable controllers.
- Gather system requirements / user stories.
- Write system test plans and assist in validation testing.
- Document your 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
- User Interface and user experience design principals and best practices
- Storyboarding / mock-ups
- Qt framework with QML
- C/C++ software development
- Basic knowledge of UDP/TCP networking

Desirable
- Illustration / graphics design skills
- Data marshalling between QML and C++
- OpenGL and the Magnum Graphics Engine
- Java/Kotlin for Android development
- Windows/Linux development
- Knowledge of UDP/TCP networking and usage of communication middleware
- Google Protocol Buffers
- Python

Essential Qualifications	Preferred Qualifications
• A relevant engineering, science degree or equivalent	• Post graduate qualification in Software Engineering or Computer Science • Chartered status and member of a recognised professional institution

Essential Experience	Preferred Experience
• Worked as part of a team designing and implementing User Interfaces	• A senior member of, or leading, a team designing User Interfaces • UI design and implementation for Autonomous Vehicle or Robot control • Agile development processes

What is the candidate likely to be doing now?
- Designing and implementing User Interfaces for desktop, mobile or other HMIs

Other information
- Must be self-motivated, capable of working independently, innovative, demonstrable track record of delivery
- Prepared to travel within the UK and overseas, potentially involving extended periods during project delivery