

Candidate Information

Position: Research Fellow in AI for Software Engineering for Autonomous Vehicles **School/Department:** School of Electronics, Electrical Engineering and Computer Science

Reference: 25/112965

Closing Date: Monday 1 December 2025

Salary: £41,519 per annum

Anticipated Interview Date: Wednesday 10 December 2025

Duration: 24 Months

JOB PURPOSE:

We aim to appoint a highly motivated postdoctoral research fellow to primarily contribute to a Horizon Europe project focusing on the use of Artificial Intelligence for Software Engineering for Highly Automated/Autonomous Driving Systems, also known as Autonomous Vehicles, as well as other relevant research activities within our research group, Connected and Cooperative Autonomous Systems.

OPPORTUNITIES:

The successful applicant will become a key member of a well-established and highly experienced team of researchers and academics working collaboratively with our industry and international collaborators, including major European Companies in the Automotive, ICT, and Software Engineering Sectors. Therefore, the appointee will have a unique opportunity to develop their professional skills and build strong collaborations within the industry and academia. QUB also hosts some of the most advanced AI computing and Autonomous Vehicle Research Facilities, which will provide an unparalleled opportunity for hands-on experience with real-world systems.

MAJOR DUTIES:

- 1. The post holder is expected to conduct cutting-edge research in the development of advanced AI techniques to transform Software Engineering Techniques. This will include Multi-Agent Collaborative AI for high automation of the Software Engineering Process, as well as Software Engineering for AI within the application area of Autonomous Vehicles.
- 2. The appointee will be expected to publish research results in top international journals and conferences that are actively relevant to the field, as well as develop software for QUB's Autonomous Vehicle Research Platform. This will involve collaborating with our team of established academics, early-career researchers, research engineers, and international collaborators. The appointee will be required to travel periodically to participate in relevant project meetings and attend international conferences.
- 3. Other responsibilities include:
 - In consultation with the project team, promote research milestones and outputs at national and international conferences and through social media.
 - Contribute to the preparation of funding proposals and applications to external bodies.
 - Carry out occasional educational supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
 - Undertake supplementary duties relevant to the success of the project, including administrative duties and additional training and development activities as required.
 - Plan own day-to-day activity within the framework of the agreed research programme.
 - Contribute to the planning of research projects, reports, publications, etc.
 - Assist PI and project team in organising relevant events.
 - · Liaise regularly with project partners.

ESSENTIAL CRITERIA:

- 1. A PhD with relevant research in one of the following areas: Artificial Intelligence, Software Engineering, or Autonomous Vehicles. We also welcome applicants who have submitted their thesis, passed their viva voce exams, and are awaiting the formal award of their PhD.
- 2. Experience in software development for real-world applications or simulation.
- 3. Research background and interest in one of the following areas: Al, Software Engineering, Autonomous Vehicles.
- 4. Evidence of publication in top international journals and conferences.
- 5. Demonstrate practical problem-solving skills, independence of thought and initiative.
- 6. Proven ability to communicate complex information effectively in oral and written formats.
- 7. Proven ability to build relationships/develop internal and external networks.
- 8. Ability and desire to work in a team with minimal supervision.

DESIRABLE CRITERIA:

- 1. Some postdoctoral research experience.
- 2. Familiarity with the development of research proposals.
- 3. Experience in the management and administration of research projects.

ADDITIONAL INFORMATION:

Informal enquiries may be directed to Mehrdad Dianati m.dianati@qub.ac.uk