



JOB DESCRIPTION

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| Job Title: | Postdoctoral Research Assistant |
| Department / Unit: | Computer Science |
| Job type | Full time, Fixed Term - Professional Services |
| Grade: | RHUL 7 |
| Accountable to: | Professor Kostas Stathis |
| Accountable for: | N/A |
| Purpose of the Post | |
| <p>The current post relates to recent Leverhulme Global Professorship grant awarded to Prof. David Levine who has joined RHUL in September 2023. The project includes not only Computer Science but also involves Economics and Psychology.</p> | |
| Key Tasks | |
| <p>The holder of the current post will join a project team, led by Prof. David Levine as Leverhulme Global Professor, to deliver a large-scale funded research project on social norms. The project combines theoretical development, advanced quantitative methods, and experimental designs in a mix of research methods. Associated tasks include:</p> <ul style="list-style-type: none"> • Serve as team member in the development of the project design and research setup. • Stay updated with the most recent research in the areas of multi agent learning, AI and social norms, relevant agent models, human-like agent models, and experimental designs based on simulation using agents and humans. • Design and build components of novel experimental platforms to support the interdisciplinary models involved. • Pilot, refine and optimise experimental methods to be employed within the project. • Implement novel methods and techniques in a multi-agent setting. • Write up research into publishable research outputs, present these at international conferences and submit to leading international academic journals. • Engage with project members and other stakeholders as required. • Enhance the departmental research agenda through application of theoretical and empirical research designs. • Develop research funding proposals in collaboration with department academic staff and submit to appropriate funding bodies. • Read academic papers, journals, and textbooks to keep abreast of project related developments and techniques. | |

Other Duties

This job description reflects the present requirements of the post, and as duties and responsibilities change/develop, the job description will be reviewed and be subject to amendment in consultation with the post holder.

The post holder will carry out any other duties as are within the scope, spirit and purpose of the job as requested by the PI, Prof. David Levine.

The post holder will actively follow RHUL policies including Equal Opportunities policies and be expected to give consideration within their role as to how they can actively advance equality of opportunity and good relations between people who share a relevant protected characteristic and people who do not share it.

The post holder will maintain an awareness and observation of Fire and Health & Safety Regulations.

The post holder will carry out their duties in a resource efficient way and actively support RHUL's Sustainability policies and objectives within the remit of their role.

The successful candidate will need to meet RHUL's expectations of core behaviours.

Internal and external relationships

The following list is not exhaustive, but the post holder will be required to liaise with: Students, other members of staff within the school/department and College, academics in other institutions and, where relevant, industrial or professional contacts.

ROYAL HOLLOWAY
University of London

PERSON SPECIFICATION FORM

Job Title: Postdoctoral Research Assistant in Agent Modelling

| | Essential | Desirable |
|---|----------------------------|-----------|
| <p>Knowledge, Education, Qualifications and Training</p> <p>PhD in relevant subject area (or near completion of)</p> <p>Experience of designing, formulating, and implementing AI agents for a specific domain (online and/or in-lab)</p> <p>Demonstrable comprehensive knowledge in the subject area</p> <p>Experience of working in industry in a research capacity</p> | <p>X</p> <p>X</p> <p>X</p> | <p>X</p> |
| <p>Skills and/or Abilities</p> <p>Ability to use key AI and/or Machine Learning software, e.g., Python, Java, C++, Prolog, Javascript</p> <p>Proven ability to analyse and write up research results and handle related administrative duties</p> <p>Ability to develop multi-agent applications using an existing agent platform</p> <p>Excellent communication and presentation skills, with the proven ability to communicate effectively, both verbally and in writing, with students, colleagues, and external audiences including the ability to present complex information effectively to a range of audiences</p> | <p>X</p> <p>X</p> <p>X</p> | <p>X</p> |
| <p>Experience</p> <p>Evidence of a publication record in good quality journals</p> <p>Experience/expertise with computational modelling of agent models and behaviour.</p> <p>Practical experience of developing agent models, using symbolic and sub-symbolic AI techniques.</p> | <p>X</p> <p>X</p> <p>X</p> | |

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| Experience with the teleo-reactive model of agent execution. | | X |
| Experience with experimental data-analysis | | X |
| Experience with developing an agent environment in a AI programming language. | X | |
| Experience with constructing research funding proposals | X | |
| Demonstrated enthusiasm for open science research practices | | X |