The Faraday Institute
St Edmund's College
Cambridge CB3 0BN

THE FARADAY INSTITUTE FOR SCIENCE AND RELIGION, CAMBRIDGE

Research Associate, Robotics and Artificial Intelligence Project

Job Description

Job Title:	Research Associate (Full time)
Ref:	FP3/5
Department:	Faraday Institute, St Edmund's College
Reporting to:	Prof. John Wyatt
Salary:	£28,661 to £31,330 per annum depending on qualifications and experience
Grade:	7
Contract:	36 month fixed term contract
Location:	The Faraday Institute in St. Edmund's College, Cambridge
Hours:	36.5 hours per week
Holiday entitlement:	25 days annual leave plus 8 public holidays

Overview

The Faraday Institute for Science and Religion is looking to recruit a full time Research Associate to work on a three-year research project entitled '***The impact of advances in robotics and AI technology on human identity and self-understanding'*** (see project summary). The Research Associate will take up the post as soon as possible.

Tel: 01223 741281 Fax: 01223 741285 E-mail: Faraday.Administrator@st-edmunds.cam.ac.uk
www.faraday-institute.org
St Edmund's College is a registered charity, number 1137454

Detailed job description

The Faraday Institute for Science and Religion was founded in 2006 and is an inter-disciplinary research institute in St Edmund's College, Cambridge, part of the University of Cambridge. It aims to conduct high quality academic research on the science-religion discourse and to disseminate the fruits of research in the public domain. For more details visit the website www.faraday-institute.org

'The impact of advances in robotics and AI technology on human identity and self-understanding' is an innovative project funded by the Templeton World Charity Foundation as part of a three-year grant to the Faraday Institute commencing in 2015. The project will focus on the exploration of a range of novel and profound societal, philosophical and theological issues which emerge from recent developments in robotics and AI technology. In particular we will test the hypothesis that technological advances and an increasing frequency and intensity of human interactions with intelligent machines are changing both popular societal and scholarly understandings of what it means to be human.

The specific research questions are:

• What are the implications of advances in robotics and AI on popular societal understandings of human nature and identity, as expressed in films, novels and popular culture?

• What are the implications of advances in robotics and AI for traditional Christian and other religious understandings about the uniqueness of human beings? In particular how do these advances impact on the Judaeo-Christian understanding of human beings as being "in the image of God"?

• To what extent does the effective simulation of human behaviour and speech by AI provide genuine and novel insights into the fundamental nature of our humanity? To what extent do they confirm and reinforce materialistic conceptions of what it means to be human and of the nature of personhood?

• What are the implications of effective simulation of human compassion, empathy and emotional intelligence by AIs for our understanding of human relationships? If assistive robots are increasingly seen as effective sources for human-like companionship, love and meaning, what are the implications for the care of vulnerable human beings, including children, and disabled and elderly people?

• What ethical and regulatory frameworks are appropriate for the supervision of intelligent machines that interact with human beings? Should the creation of human-like robots be regulated and controlled, and if so in what way?

The fundamental aim is to encourage and promote a conversation between academics and stakeholders within relevant disciplines on these wide-ranging topics. The questions will be addressed using small group discussions and individual semi-structured interviews. Individuals from a range of relevant academic disciplines will be approached to participate in these activities. Relevant disciplines include: computing, AI and robotics, philosophy, theology, neuroscience, neurology, social sciences and political and regulatory authorities.

For further details please see the Project Summary.

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The Research Associate will work under the direction of the Principal Investigators, Prof. John Wyatt, University College London, and Prof. Peter Robinson, Department of Computing, University of Cambridge, to implement the research project. Responsibilities include the following:

- To conduct a survey of film, novels and other aspects of popular culture to identify and analyse the impact of robotics and AI on popular societal understandings of human nature and identity.
- To assist and provide academic support for the regular meetings of the expert panel.
- To plan and conduct fieldwork, involving small group discussions and individual semi-structured interviews with stakeholders from a range of relevant academic disciplines to address the specific research questions given above. Fieldwork will be carried out initially within the UK, but at a later stage of the project it will also involve short-term research trips to European, North American and East Asian academic centres.
- To record, transcribe and analyze individual interviews and group discussion sessions in order to identify fundamental themes, assumptions, perceptions and concerns which are relevant to the primary research questions.
- To organize at least one multidisciplinary symposium within the period of the research grant.
- To analyse and write up the research results and project conclusions for publication in peer-reviewed academic journals.
- To organise the public dissemination of the research results in a variety of formats.
- To ensure the smooth running of the project by carrying out such administrative duties as may be required.

Person specification

Essential

- Doctoral or Masters degree in a relevant area of scholarship;
- Proven experience of conducting and analysing social scientific research;
- Track record, appropriate to career stage, of research publications;
- Proven track record demonstrating excellent organisational and administrative abilities;
- Excellent communication skills in English, both oral and written, including presentation skills;
- Ability and willingness to work as a member of a team, in research and administration;
- Able to be based at the Faraday office in Cambridge a minimum of three days per week;
- Willingness to travel within the UK and on short-term international research trips;
- Good IT skills;
- The applicant must be in agreement with the ethos and aims of the Faraday Institute and is expected to take a full part in the Institute's activities.

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Desirable

- Experience of planning and running academic conferences;
- Previous academic or practical experience in the field of computing or artificial intelligence

TERMS AND CONDITIONS OF WORK

- **Full time: 36.5 hours per week**
- **Probationary Period: 6 months**
- **36 month fixed term contract**

Application process

Applications quoting position FP3/5 should include an academic CV, naming three referees, together with a covering letter summarising the relevance of the applicant's background and experience for this position. Applications (preferably by e-mail) should be sent to: The Faraday Institute Administrator (faraday.administrator@st-edmunds.cam.ac.uk) by the closing date of 28 September. Interviews are expected to be held on **Monday 21 October** in Cambridge and the appointment will be made as soon as possible thereafter.

Staff benefits include:

- One free meal per day during working hours
- Free car parking on site (depending on availability)
- 25 days annual leave plus 8 public holidays
- Contributory Pension Scheme

Pre-employment requirements

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. If you need further information, you may find the Right to Work page within the 'Applying for a job' section of the University of Cambridge's Job Opportunities pages helpful (please see http://www.jobs.cam.ac.uk/right/have/)

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