

UNIVERSITY COLLEGE LONDON

INSTITUTE OF COGNITIVE NEUROSCIENCE

PhD Studentship (£17,040 PER ANNUM)

A 3-year PhD studentship is available in the Social Neuroscience group (led by Dr Antonia Hamilton) at the Institute of Cognitive Neuroscience, University College London, in collaboration with Prof Marco Gillies at Goldsmiths College.

The PhD project is titled **Understanding and generating real-time face-to-face social interactions**, and aims to use new motion capture and virtual reality technology to understand the coordination of nonverbal behaviour between two people in high resolution. The student will have a lead role in recording and analysing data on social interactions between two people using motion capture and video tracking, and testing how behaviour changes in different social contexts. In parallel, other members of the research team will develop virtual reality avatars based on the motion capture data, and the PhD student will help test the validity of these models. Thus, the project is an innovative collaboration between psychology and computer science with exciting opportunities for a student to gain new insights into human behaviour and social cognition.

The PhD is based at the Institute of Cognitive Neuroscience, which is one of the world's leading institutions for the study of human cognitive function and has a vibrant and international research community. The project is part of a collaboration with Goldsmiths College department of Computing, with expertise in Virtual Reality and interactive virtual humans. This work is funded by the Leverhulme Trust.

As background reading to the project, we recommend

- Gillies, Brenton, Kleinsmith, 2015. *Embodied design of full bodied interaction with virtual humans*, in: Proceedings of the 2nd International Workshop on Movement and Computing - MOCO '15. ACM Press
- Schmidt, Nie, Franco, Richardson, 2014. *Bodily synchronization underlying joke telling*. Front. Hum. Neurosci.
- Wang, Hamilton, 2012. *Social top-down response modulation (STORM): a model of the control of mimicry in social interaction*. Front. Hum. Neurosci.

Person specification:

Applicants should have a recent BA/BSc (or equivalent) in psychology, cognitive neuroscience, engineering (with emphasis on human factors) or computer science (with emphasis on human factors). Applicants with a completed MSc degree and/or with high grades on relevant courses will be given preferred consideration. Computer programming knowledge (ideally Matlab) and experience of studying human behaviour is essential. The successful applicant is expected to enrol in the PhD program at UCL.

Eligibility (as required by funders)

- Candidates must meet criteria for UK/EU university fees (see https://www.ucl.ac.uk/current-students/money/fees-support/fee_status_proc for full rule). Overseas fees cannot be covered under this studentship.

Start data / Length of contract

The starting date is 1st January 2017. The contract is for 36 months

Fellowship

This is a fully funded PhD studentship with a stipend of £17,040 per year.

Applications

To apply, please prepare the following information:

- a cover letter stating your research interests and your motivation for applying for the studentship.
- a detailed curriculum vitae, with information on courses, grades and specific skills relevant to this position. Also state if you meet criteria for UK/EU university fees.

- contact details for 2 referees.

Please put all this information in a single .pdf file named with your surname (e.g. Smith.pdf) and email it to Antonia Hamilton (a.hamilton@ucl.ac.uk) by the deadline.

The application deadline is the **30th November 2016**.

Informal inquiries regarding the position should be addressed to Dr. Antonia Hamilton (a.hamilton@ucl.ac.uk) and further details of our work is on www.antoniahamilton.com and <http://www.doc.gold.ac.uk/~mas02mg/MarcoGillies/>