

EPSRC DTP PhD Studentships: Specific Project Advert

Applications are invited for our EPSRC funded Doctoral Training Partnership (DTP) PhD studentship for the project **“Companion Robot Development based on Multimodal Emotion Recognition for Mental Health Applications”** starting 1st October 2021. Successful applicants will receive an annual stipend (bursary) of £17,609, including inner London weighting, plus payment of their full-time tuition fees for a period of 36 months (3 years).

You should be eligible for home (UK) tuition fees but there are a limited number (no more than three) of studentships available to overseas and EU nationals who meet the academic entry criteria.

The Project

You will join the internationally recognised researchers in the Department of Electronic and Electrical Engineering, [Centre of AI](#) and [Intelligent Digital Economy and Society](#). This exciting research project is focused on the development of a companion robot especially with advanced emotion recognition ability from multiple modalities. Apart from current deep learning models, neuromorphic computing models will be considered as it can simulate human brain architecture and behaviour for reasoning, pattern recognition, and decision making. The companion robot will be specially designed for mental health applications with the capability of recognising human emotions and take suitable interactions with human beings.

Please contact [Dr Hongying Meng](#) at Hongying.meng@brunel.ac.uk to arrange an informal discussion about the project.

Skills and Experience

Applicants will be required to demonstrate their ability to develop neural network models for emotion recognition, feature extraction and multiple modality fusion; develop and implement real-time algorithms at multiple platforms with strong programming skills. You should be highly motivated, able to work independently as well as in a team, collaborate with others and have good communication skills.

Experience in machine learning/deep learning algorithm development, robot design, sensor interfacing, signal acquisition, signal processing, and programming in MATLAB, C++, Python, Java, etc will be desirable.

Academic Entry Criteria

You will have or be expected to receive a 1st class or 2:1 honours degree in Electrical, Electronic and Computer Systems Engineering or a similar discipline. A Master degree is not required but may be an advantage.

If applicable, you should hold an English Language proficiency qualification of or equivalent to an overall score of IELTS 6.5 (minimum 6.0 in all sections).

How to Apply

Please submit the documents below to cedps-pgr-office@brunel.ac.uk by **Noon on Friday 4 June 2021**. Interviews will take place in June/July 2021.

- Your up-to-date CV;
- Your 300 to 500 word personal statement summarising your background, skills and experience;
- Your Undergraduate/Postgraduate Master degree certificate(s) and transcript(s);
- Contact details for TWO referees, one of which can be a member of Brunel University academic staff.