

CIPA - Enterprise Ireland - Innovation Partnership Postdoctoral Researcher (18 Month) - Ultrasound Image Analysis

Job Title

Post-Doctoral Researcher (CIPA, Dublin City University): *Bio-Medical Computer Vision – the automatic identification, analysis and classification of key bovine reproductive (anatomical) features using ultrasound imaging.*

Project Background

CIPA has recently been awarded an Enterprise Ireland Innovation Partnership grant to focus on the automatic computer aided detection of reproductive cycle and pregnancy of bovines from ultrasound images. The team is made up of researchers from Dublin City University (CIPA) and Reprodoc Ltd (who specialize in bovine fertility management). We are currently hiring two postdoctoral researchers in CIPA (Dublin) to support this work.

Research Question

This research aims to develop a computer aided detection system for automatic identification of reproductive cycle and pregnancy of bovines from ultrasound images using computer vision techniques. The automatic Computer Aided Detection (CAD) system can be employed as a first reader for herd management (mainly focused on bovine reproductive cycle and its status) and only use human experts in the minority of cases where abnormalities have been detected by the software. The applied research outputs significantly advance the state of the art and address a real market need.

Reporting to:

Prof. Paul F Whelan, Director - Centre for Image Processing and Analysis (DCU)

Duties and responsibilities

This research stream will involve the ***automatic identification, analysis and classification of key bovine reproductive (anatomical) features using ultrasound imaging.*** The Centre for Image Processing & Analysis (CIPA) at Dublin City University has already developed global 2D and 3D shape extraction and texture analysis techniques for use with ultrasound imaging, and this project aims to build on this work.

Qualifications

The candidate would be expected to have a PhD in Computer Vision (or a related computer science, engineering or analytical area) plus significant post-doctoral and/or industrial research experience. A record of international collaboration, funding acquisition, research leadership and research management would be an advantage. Experience with ultrasound image analysis / texture analysis and/or geometric shape analysis would also be considered an advantage. Post-doctoral candidates should demonstrate the capacity to be productive researchers. As part of the selection process candidates' publication records will be carefully considered. A self-starting attitude, good presentation skills, teamwork and an eagerness to promote your research are essential.

Contract Duration/Salary

Up to 18 months (2011-2013). The salary, typically in the range **€37,750 - €46,255** p.a., (IUA Level 2) will be commensurate with experience and qualifications. Please quote **Ref: CIPA-EIIP-PDR** clearly on your application.

Application Procedure

CIPA is committed to research excellence. Our posts offer an exciting opportunity for successful candidates to tackle fundamental research problems within a stimulating multi-disciplinary research environment with state of the art facilities and strong links to the national and international research community. The successful candidates will join an active and expanding computer vision and biomedical imaging systems research program. Further details on the CIPA and its activities can be found on its web-site www.cipa.dcu.ie.

Informal enquiries and applications [covering letter, curriculum vitae and names and contact details for three referees] in relation to the post should be directed to:

Laura Robertson
Administrator
Centre for Image Processing & Analysis,
Dublin City University,
Dublin 9, Ireland.

E-mail: laura.robertson@dcu.ie