



Research Centre	Insight Centre for Data Analytics
Post Title	Research Assistant – GaitKeeper project
Post Duration	12 months

Background

The Insight Centre for Data Analytics (<http://www.insight-centre.org>) is an SFI funded Research Centre which brings together researchers from University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions, Trinity College Dublin (TCD), University of Limerick (UL), National University of Ireland, Maynooth (MU) and Tyndall National Institute. It creates a critical mass of more than 400 researchers from Ireland's leading ICT clusters to carry out research on a new generation of data analytics technologies in a number of key application domain areas, such as Health and Human Performance, Smart Communities, Internet of Things, Enterprise and Services and Sustainability and Operations.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry and European Union partners. Insight's research focus encompasses a broad range of data analytics technologies from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. Together, with more than 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

The Project

The GaitKeeper project is building the world's first system to deliver gait analysis as a service. Using novel AI and AR technologies, GaitKeeper allows clinicians to use a mobile application to record gait tests, upload the recordings to the GaitKeeper cloud and within minutes receive quantitative gait profile data. The GaitKeeper team are responsible building the end to end system, performing comparative testing with other Gait analysis approaches and supporting end users.

Principle Duties and Responsibilities

You will have a mobile-first approach and you'll be interested in pushing boundaries and producing work that's intuitive, unique, clever and provides engaging customer experiences. Specific duties include:

- Research into state of the art deep learning approaches for processing video.
- Development of prototype software for the GaitKeeper front end and back end.
- Adherence to version management of software assets in Github
- Weekly agile development planning, management and reporting.
- Planning and Support for GaitKeeper testing with DCU Motion Capture Lab.

Minimum Criteria

You must hold a primary degree (NFQ Level 8) in a relevant discipline and should have at least have 1 year of relevant experience.

Skills

- Python, OpenCV, Matplotlib, numpy and sciplot development experience
- Excellent knowledge of full-stack web/mobile development using Node.js/webRTC with Java, Objective C and/or Python.
- MongoDB database management and integration experience.
- Deep Learning API development experience.
- Docker experience would be welcomed.
- Proven ability to prioritize workload and work to strict deadlines.
- Ability to work in a team and to take responsibility to contribute to the overall success of the team.
- Strong problem solving abilities.

Mandatory Training

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

Additional Information

Salary Scale: *€22,109 – €34,612 per annum

*Appointment will be commensurate with qualifications and experience

Closing date: 30th August 2019

Informal enquiries to:

Dr. Aidan Boran, Senior Research Fellow, Insight Centre for Data Analytics, Dublin City University.

E-mail: aidan.boran@insight-centre.org

Application Procedure

To apply for this role, application forms are available from the DCU Current Vacancies (open Competitions) website at <http://www.dcu.ie/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

Please clearly state the role that you are applying for in your application and email subject line: #RF1264 Research Assistant – GaitKeeper project

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: hr.applications@dcu.ie

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