Research Centre  | Insight Centre for Data Analytics  
Post Title  | Research Assistant, Insight NBMC 
Targeted Project  
Post Duration  | 18 Months  

Background  
The Adaptive Sensors Group ([www.adaptivesensors.com/](http://www.adaptivesensors.com/)) is a large, multidisciplinary research unit hosted by the National Centre for Sensor Research (NCSR), in state-of-the-art facilities situated on the campus of Dublin City University. Core funding for the ASG is provided by Science Foundation Ireland through the INSIGHT Centre initiative ([https://www.insight-centre.org/](http://www.insight-centre.org/)), supplemented by significant project based income provided by Enterprise Ireland, the Marine Institute, EPA and Industry partners. Arising from funding awarded by the US-MicroNanoBio-Manufacturing (NBMC) consortium for a targeted project in the Insight Centre, the following research position is available. Partners in the proposal include GE Global Research (NY), American Semiconductor Inc., AFRL, University of Massachusetts Amherst, UES, University of Arizona, and University of Connecticut.  

Role  
This Research Assistant position is focused on the development of wearable patch-type devices for monitoring specific indicators of the wearer’s general condition and health status. This particular project is part of a major effort to develop reliable ways to track skin hydration and sweat composition in real time using sensors and fluidics embedded within a wearable on-skin patch. The role involves integration of system components to produce a functioning prototype device incorporating fluidics for sample handling, sensors for monitoring of skin condition and sweat composition, and interfacing to system electronics.  

Duties and Responsibilities  
Reporting to his/her Principal Investigator and his/her immediate supervisor, the Research Assistant will:  

- Conduct a specified programme of research on the design, fabrication and integration of system components that comprise the wearable patch-based sensing platform  
- Deliver project outputs and provide input into reports as required according to project management schedules  
- Participate in lab-based validation studies of prototype devices at DCU and with project partners as required for the success of the project  
- Attend and present results as required at project technical progress meetings and group meetings.
• Liaise with both internal and external stakeholders including industry and academic partners/collaborators.
• Maintain an up-to-date lab-book and personal profile on the group website.
• Engage in the dissemination of the results of the research at international conferences and support the publication of research outputs in high impact international journals.
• Contribute constructively to the team-based ethos within the group.
• Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
• Carry out administrative work associated with the programme of research as and when necessary.

Experience and Qualifications
Candidates must have a primary degree in which mechanical engineering, electronic engineering or mechatronics was a significant component. Experience in 3D CAD/CAM design, circuit design, working with textiles or wearable electronics/device development or materials science or microfluidics would be an advantage.

Closing Date: Friday 1st May, 2015

Salary in the range €21,850 – €25,330
Appointment will be commensurate with qualifications and experience.

Informal enquiries to:
Dr. Shirley Coyle, Insight Centre for Data Analytics, DCU, Dublin 9, Ireland
E-mail: shirley.coyle@dcu.ie Phone: +353 (0)1 7006009
Please do not send applications to this email address, instead apply as described below

Application Procedure
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 quote the position reference code (Ref. Insight RA NBMC) in your application.

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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