Research Centre

INSIGHT

Post title

Research Assistant
(RA_IN01)

Microfluidics Engineering & Prototyping

Post duration

Fixed Term Contract - Up to 4 years

Background

The INSIGHT Research Centre for Big Data Analytics is a joint initiative between researchers at University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions. It will bring together a critical mass of more than 200 researchers from Ireland’s leading ICT centres to develop a new generation of data analytics technologies in a number of key application areas.

The €70m centre is funded by Science Foundation Ireland and a wide range of industry partners. INSIGHT’s research focus encompasses a broad range of data analytics technologies and challenges, from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. And together with more than 30 partner companies INSIGHT researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy. The Discovery Economy refers to novel products and services based on a better understanding of short and long-term user needs. It combines ideas from personalization and recommender systems with location-based services and the real-time social web. Connected Health advocates a technology-based model for healthcare delivery to maximize healthcare resources and provide increased, flexible opportunities for people to engage with clinicians and better self-manage their own care.

Within DCU, INSIGHT will continue the work done as part of the CLARITY CSET and will initially involve researchers across Materials Science and Chemistry, Computing, Engineering, and Health and Human Performance.
Role
This position will support a range of research activities including microfluidic system fabrication and characterisation, electronics/power/wireless communications, integration of fluid handling (pumps, valves, microfluidics chips) to produce fully functioning and ruggedised autonomous chemical sensor platforms.

Principle Duties and Responsibilities
Reporting to his/her Principal Investigator the Research Assistant will:

- Deliver critical components for emerging sensor platforms, such as electronic circuits, micro/macro fabrication (e.g. micromachining, 3-d printing), software development related to prototype user interfaces, data harvesting and cloud-based data access
- Contribute to the delivery of demonstrators across a range of research projects.
- Contribute to the maintenance and upkeep of the group’s computing infrastructure and resources, including web site development and maintenance for specific projects.
- Contribute to the group research programme in close collaboration with PhD and Postdoctoral level Researchers.
- Present research outputs and demonstrator systems at national and international scientific meetings and stakeholder workshops; publish research in peer-reviewed conferences and journals jointly with other members of the research team.
- Complete other tasks relevant to successfully implementing the INSIGHT Personal Sensing research programme, as designated by the Principle Investigator.

Minimum Criteria
Candidates should have a primary degree in mechatronics, mechanical and/or electronic engineering in which mechanical and electronic engineering. Experience with systems integration including software development and device prototyping would be a significant advantage.

Salary: €21,850 – €30,200 subject to experience & qualifications

Closing date: 12th June 2013
Application Procedure:

Informal enquiries to:
Prof. Dermot Diamond, INSIGHT, Dublin City University, Dublin 9
E-mail: Dermot.diamond@dcu.ie

Application Procedure:
Applicants should quote Ref. No. RA_IN01 when applying for this position. Application forms are available at http://www.dcu.ie/vacancies/APPLICATION_FORM_8pg.doc and from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0)1 700 5149 Fax: +353 (0)1 700 5500 Email: hr.applications@dcu.ie

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