Faculty of Engineering & Computing  
School of Mechanical & Manufacturing Engineering  
Post-Doctoral Researcher ICMR (Level 1)  
(Up to 12 Month Fixed Term Contract to commence ASAP)

The Enterprise Process Research Centre in the School of Mechanical and Manufacturing Engineering is working with the Irish Centre for Manufacturing Research on BreakCycle, a project to develop a Rapid Modelling capability to assist the improvement of Cycle Time and Efficiency in production systems. An ontology for the description has been developed, and needs to be implemented in a form which enables its use on local and cloud platforms. Companies involved in this work include INTEL, Boston Scientific, Bombardier, Seagate, and DePuy. This project is funded by Enterprise Ireland and the IDA.

Applications are invited from suitably qualified candidates for the position of Postdoctoral Researcher on the BreakCycle Project. The successful candidate will be qualified to PhD level in the area of Industrial Engineering or Computer Science, with experience in dealing with large datasets. They will have experience in software development, planning and life cycle management. Experience in interacting with industry and academia is desirable.

Role:
The post-holder will be responsible for the development of an object oriented data mining application for the rapid deployment of discrete event simulation for modelling of complex manufacturing systems with large datasets. Reporting to the project PI and the Program Manager from the ICMR, and working with the system developer this role requires the ability to design and implement software to enable efficient mining of key information from manufacturing data records and ERP systems, storage of the information in a structured relational database and implementation on a cloud platform. Development will be based on open source software. In this role the successful candidate will also be required to interact with the ICMR companies and the DCU development team.

As part of this role the successful candidate shall be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Candidates for position of Postdoctoral Researcher will be assessed on the following competencies:

**Discipline knowledge and Research skills** – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.
Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.

Communicating Research – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students.

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students.

Informal enquiries to:
Dr Paul Young, School of Mechanical & Manufacturing Engineering, DCU
E-mail: paul.young@dcu.ie  Tel: +353 (0)1 7008216

Salary Scale: €37,750 per annum
Subject to experience and qualifications

Closing date: Tuesday 14th August 2012

Application Procedure:

Application forms are available from:
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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