PostDoc Job Opportunity

DUBLIN CITY UNIVERSITY	First Name	Last Name	email		Institute	Address
PI name & contact details:	Alan	Smeaton	alan.smeaton@dcu.ie		DUBLIN CITY UNIVERSITY	Glasnevin, Dublin 9, Ireland.
School:	Computing					
Research Centre / group affiliation:	Insight Centre for Data Analytics					
Research group / centre website:	http://insight-centre.org/					

Brief summary of research group / centre activity:
Insight is the largest single investment the Irish government has ever made in research in science in Ireland. It brings together the expertise of approximately 300 researchers across 4 Universities with a focus on Data Analytics and Big Data. Insight's mission is to focus on new ways to capture and understand data from the world around us, making better decisions for people, communities and industry, and creating a more informed society in a healthier more productive world.

Description of postdoctoral project on offer:
The project is to develop a theoretical framework for combining or fusing multiple sources of information on an end user's CONTEXT or situation, especially around the information needs of that user. We all know that when we use search engines, if the search engine knew more about the user such as the task that user is performing, the time constraints, the budget restrictions, others with whom the user is collaborating, then the search engine output would change. What happens if we use multimedia sources of sensors as signals for a user's context … physiological signals like Galvanic Skin Response, Heart rate, Respiration Rate, eye tracking, EEG signals, etc. … environmental signals like location, who else is working with the user at that time etc. … activity signals like the users' other current tasks, calendar, schedule, deliverables, etc. All this information is now available to us and in Insight we have a framework for capturing this, and other forms of user context. This information can sometimes be conflicting, it can have errors, and it is unstructured and sometimes untrustworthy. The work required here is to build a framework for resolving these issues, and developing and testing an implementation of this on real world data..

Please indicate the core skills or disciplines that are required for this position:
Visualisation, some mathematical modelling, programming