Tutorial on Explainable AI using CBR

Organizers:

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iSee¹ is a CHIST-ERA funded project being developed by a consortium of European universities (Complutense University of Madrid, Robert Gordon University, University College Cork) and an industrial partner (BT France). It aims to build a platform that captures, stores, and re-uses end-user explanation experiences for various AI models using Case-Based Reasoning methodology. Cases are formed of knowledge of the AI model and its user group (problem component), the explanation strategy recommended (solution component), and feedback from the user group to describe whether the provisioned explanations were satisfactory (outcome component). In this manner, cases represent a comprehensive record of explanation experience. In this tutorial, the iSee project team would like to share with the participants the latest developments of this project, especially:

- How explanation experiences are represented in an ontology created for the project
- How explanation experiences are captured in a case-based database
- How use cases can be designed and represented in the system
- How explanations are progressively and interactively provided to end-users using a chatbot and how they can be evaluated.
- How end-user evaluations are measured and used to augment the explanations strategies case base.

The tutorial will culminate in attendees being able to add a 'mock' case to the system, and receive recommendations of an explanation strategy to suit that case. Pending interest from the academic community, the tutorial may be expanded to include an interactive component demonstrating the uploading of XAI algorithms to iSee's explainer API for broader industry impact.

¹isee4xai.com