Preface

1st International Workshop on Intelligent Mentoring Systems

In the world of professional development and lifelong learning, mentoring has become an important ingredient to assist learners to progress, to transit from one phase into another (e.g. from formal education to on-the-job training). Within digital learning environments, it is timely to provide a new breed of intelligent learning systems that provide mentor-like features to promote learner's 'self-actualisation'. Crucial for intelligent mentors will be the ability to help learners connect their learning that is usually acquired through digital resources with the real world, which brings forth the key challenge that the workshop aims to address.

Mentors who are to facilitate self-actualisation require a broad (but may be shallow) understanding of the learner, and the current situation in order to select appropriate pedagogical strategies and respond in a motivational, emotionally-aware way. Accordingly,intelligent Mentoring Systems (IMS) require multi-faceted learner experience modelling mechanisms to get sufficient understanding of the learner, his/her current situation, and relevance to past experiences by the same learner (or by other people). IMS will also need strategies for appropriate interaction with the learners, and to promote reflection and forward planning.

This workshop will make a major step in consolidating effort and shaping a research community by providing a forum that explores the following questions:

- What are the underpinning theories, models, and technologies for Intelligent Mentoring Systems?
- How will Intelligent Mentoring Systems support learners and tutors?
- In which domains/contexts do we expect to see Intelligent Mentoring Systems?
- What are the key research aspects to address next?

The workshop will include two main sessions of paper presentations, each followed by a group discussion.

The first session includes position papers discussing key underpinning for intelligent mentoring systems. In '*Some Challenges for AIED Systems in Taking on Long Term Mentoring*' Du Boulay sets out key challenges faced by designers of systems for mentoring learners over longer periods of time. In '*Intelligent Mentoring Systems for Making Meaning from Work Experience*' Dimitrova et al. present a vision for intelligent personal assistants to foster meaning making from work experience. In '*Personalised and Adaptive Mentoring in Medical Education – the myPAL project*' Van Labeke et al. argue that design-based research approach is requited for designing personalised adaptive mentors. In '*An Active Learning Model Employing Flipped Learn-*

ing and Gamification Strategies' Dicheva and Dichev propose a novel instructional approach, called gamified mentored learning, which combines elements of flipped learning and course gamification.

The second session presents experimental studies that inform the design of intelligent mentoring systems. In '*Dynamics of Trust in Group Peer Mentorship'* Adewoyin et al. present a study of group peer mentorship which found that peers' rating behavior is influenced by their trust score and it depends on the roles that they assume in the mentoring relationship. In '*Group Learning, Student Clustering and Peer Mentorship'* Popescu et al. present features for adaptive group learning and peer mentorship. In '*Usability of an Active Video Watching System for Soft Skills Training'* Lau et al. report initial results from an experimental study with an active video watching system that provides self-regulated learning scaffolding for soft skills learning.

Each paper was reviewed by two members of the workshop program committee.

Workshop Program Committee:
- Vincent Aleven, Carnegie Mellon University, USA
- Roger Azevedo, North Carolina State University, USA
- Ben Du Boulay, University of Sussex, UK
- Paul Brna, The University of Edinburgh, UK
- Darina Dicheva, Winston-Salem State University, USA
- Alexandra Poulovassilis, Birkbeck College, University of London, UK
- Nicolas Van Labeke, University of Leeds, UK
- Phil Winne, Simon Fraser University, Canada

Workshop Chairs:
- Amali Weerasinghe, University of Adelaide, Australia
- Vania Dimitrova, University of Leeds, UK
- Lydia Lau, University of Leeds, UK
- Antonija Mitrovic, University of Canterbury, New Zealand