ARTIFICIAL AND HUMAN INTELLIGENCE

SIG CONVENORS

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Over the last 30 years, the academic study of intelligence has been in a process of decline, but recently this has changed dramatically. The main catalyst for this change has been the growth of extensive research in the fields of neural networking and machine learning. Consequently interdisciplinary interest in intelligence as a technical, social and psychological construct is increasing in prominence. In the case of educational research, there is growing interest in both human and machine learning, particularly in areas such as the areas of:

- The promotion of social inclusion and mobility;
- The relationship between intelligence and heritability;
- The potential for interface between human and machine learning, and
- The expanding role of artificial intelligence in education systems as well as within wider society.

Ultimately this SIG seeks to bring together what are apparently disparate fields under the umbrella of intelligence as a whole, as a mechanism for supporting intra- and interdisciplinary research, leading debate, and promoting the impact of the work of BERA members in these new and exciting areas. The intention of the SIG is that members should liaise closely with those involved with policy and practice, including technologists working in artificial intelligence at the highest levels.

This will enable meaningful professional conversations to take place regarding the ethical and practical deployment of machine learning in educational settings, the positioning of human intelligence as a social construct within the context of learning, and the role of the commercial sector in developing and deploying cutting-edge artificial intelligence-based systems for use in learning environments. While the SIG plans to work closely with the existing Educational Technology SIG, its emphasis is very different in that it is concerned with the study of human and machine intelligence, as opposed to the educational affordances and possibilities of technology for human learning in a broader pedagogical sense.

Aims
To identify areas where educational research can inform or benefit from related work on human and machine intelligence. Examples of this might include:

- Identifying where artificial intelligence research would be enhanced through a deeper understanding of educational research conventions, methodologies, traditions and insights;
- Promoting an ethical approach to debate where human and/or artificial intelligence is being considered directly or indirectly as a factor in formulating policy;
- Reducing barriers between scholarly and commercial human and artificial intelligence research; and
- Identifying new areas for research and investment, and building research capacity.

Find out more about this SIG and BERAs other networks and communities: www.bera.ac.uk/communities

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