David Peebles

PhD CPsychol AFBPsS FHEA CMgr

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Current Posts

- Director, Centre for Cognition and Neuroscience, University of Huddersfield, UK.
- Reader in Cognitive Science, Department of Psychology, University of Huddersfield, UK.

Qualifications

- PhD, Cognitive Science, University of Birmingham, UK. 1997.
- MSc, Cognitive Science, University of Birmingham, UK. 1993.
- BA (Hons.), Philosophy & Artificial Intelligence, Middlesex University, UK. 1992

Funded research projects

- *Personalised training using the Predictive Performance Equation.* 2020. Dstl. (current).
- *Autonomous agents.* 2016. Dstl. £19k.
- *Understanding the cyber threat to autonomous vehicles.* 2016. Crown Commercial Service (on behalf of the Department for Transport). 2015. £30k.
- *Human Factors and Psychological Aspects of Designing to Support Collaborative Cyber Sensemaking.* Dstl Centre for Defence Enterprise–Understand and Interacting with Cyber. £4k.
- *Computational modelling of human performance with unmanned autonomous systems using the ACT-R cognitive architecture.* 2013. Dstl, £40k.
- *Modelling map-based orientation in realistic 3D environments*, 2005. Ordnance Survey. £30k.

Selected recent publications

- Thabtah, F., Mampusti, E., Peebles, D., Herradura, R., & Varghese, J. (2020). A mobile-based screening system for data analyses of early dementia traits detection. *Journal of Medical Systems*, 44(1), 24.
- Thabtah, F. & Peebles, D. (2019). A new machine learning model based on induction rules for autism detection. *Health Informatics Journal.*
- Peebles, D. (2019). Modelling alternative strategies for mental rotation. *Proceedings of the 17th International Conference on Cognitive Modelling.* Montreal, Canada.
- Peebles, D., & Cheng, P. C-H. (2017). Multiple representations in cognitive architectures. Proceedings of the AAAI 2017 Fall Symposium: "A Standard Model of the Mind", 9-11 November, 2017. Washington, USA.
- Pulijala, Y., Ma, M., Pears, M., Peebles, D., & Ayoub, A. (2017). Effectiveness of immersive virtual reality in surgical training–A randomised control trial. *Journal of Oral and Maxillofacial Surgery.*
- Peebles, D. (2016). Two methods for search and optimising cognitive model parameters. In D. Reitter & F. E. Ritter (Eds.), *Proceedings of the 14th International Conference on Cognitive Modeling* (pp. 234–235). University Park, PA: Penn State.
- Peebles, D., & Ali, N. (2015). Expert interpretation of bar and line graphs: The role of graphicacy in reducing the effect of graph format. *Frontiers in Psychology*, 6:1673.
- Cooper, R. P., & Peebles, D. (2015). Beyond single-level accounts: The role of cognitive architectures in cognitive science explanation. Topics in Cognitive Science, 7, 243–258.

Selected professional service & esteem

- Chartered Psychologist and Associate Fellow, British Psychological Society (2001-present)
- Editorial board member, Journal of Experimental Psychology: Applied (2016–2017).
- Associate Editor, Frontiers in Cognitive Science (2015–present)
- Editor, Topics in Cognitive Science. Special issue (Volume 7, Issue 2, 2015) on levels of analysis in cognitive science.
- Editor, Quarterly Newsletter of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (2010–2014).
- Jerome H. Ely Human Factors Article Award, 2004 recipient for most outstanding article in 2003 volume of Human Factors.
- Ad hoc reviewer, Cognitive Science; Human Factors; JEP:LMC; JEP:A; Current Directions in Psychological Science; Quarterly Journal of Experimental Psychology; Topics in Cognitive Science; ESRC; EPSRC; The Royal Society; US National Science Foundation.