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Progress in Neural Processing • 22

Proceedings of the 14th Neural Computation and Psychology Workshop

NEUROCOMPUTATIONAL MODELS OF COGNITIVE DEVELOPMENT AND PROCESSING

Lancaster University, U.K. 21 – 23 August 2014

Editors

Katherine Twomey
Lancaster University, U.K.

Alastair Smith
Max Planck Institute for Psycholinguistics, The Netherlands

Gert Westermann
Lancaster University, U.K.

Padraic Monaghan
Lancaster University, U.K.

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Preface

The 14th Neural Computation and Psychology Workshop took place at Lancaster University (Lancaster, United Kingdom) from August 21st - 23rd, 2014. This volume is a collection of peer reviewed papers that together provide a sample of the research presented during the three-day conference. The theme of the workshop was 'Development across the lifespan' with submissions invited from researchers applying emergent models, largely but not exclusively of the connectionist/neural network kind, to investigate cognition.

The 14th meeting in the well-established Neural Computation and Psychology Workshop series continued the traditions of previous meetings bringing together researchers working across the fields of computer science, artificial intelligence, neurobiology, linguistics and psychology to discuss their work in an informal atmosphere designed to promote collaboration and communication between early career researchers and established investigators alike. The program maintained the single track structure with a limited number of high quality papers presented. The program also included keynote talks by Prof. James L. McClelland (Director, Center for Mind, Brain and Computation, Stanford University), Prof. Bob McMurray (Director, Mechanisms of Audio-Visual Categorization Lab, University of Iowa) and Prof. Michael Thomas (Director, Center for Educational Neuroscience, Birkbeck, University of London).

Mirroring the diversity of the workshop program this volume provides a collection of original contributions on a diverse yet complementary range of topics each on different aspects of cognition including: neural plasticity, hemispheric asymmetry, spoken and written word processing, visual object recognition and semantic knowledge representation.

As organisers of NCPW 14 we would like to thank all the attendees with special thanks to our keynote speakers. We would also like to thank EUCogIII (European Network for the Advancement of Artificial Cognitive Systems,

Interaction and Robotics) for their sponsorship of the event and this publication and the Faculty of Science, Lancaster University who also contributed financial support towards the hosting of NCPW 14. Further, Katherine E. Twomey, Gert Westermann and Padraic Monaghan are members of the International Centre for Language and Communicative Development (LuCiD) at Lancaster University. The support of the Economic and Social Research Council [ES/L008955/1] is thus gratefully acknowledged. We look forward to future instalments of the Neural Computation and Psychology Workshop.

Katherine Twomey, Alastair Smith, Gert Westermann and
Padraic Monaghan, NCPW 14 organisers.

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