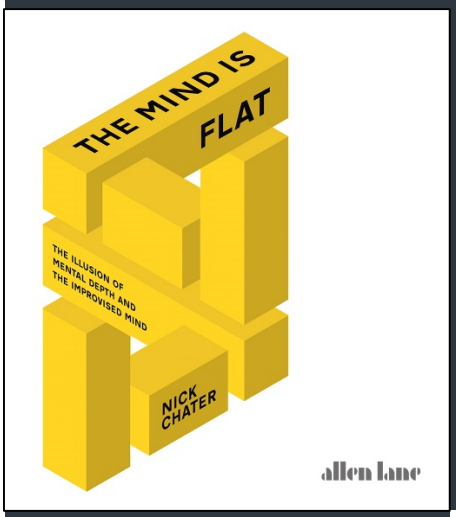
Imperial College London

HLC Newsletter

ISSUE 02
February 2019

this issue



Media

Congratulations to Nick Chater (University of Warwick) who has been declared the winner in the Clinical Psychology Category of the PROSE Awards competition sponsored by the American Association of Publishers/Professional and Scholarly Publishing Division for his recent booked *The Mind Is Flat*. It will now go on to complete for the best book in Biological Sciences.

Read More:
http://newsroom.publishers.org/association-of-american-publishers-announces-subject-category-winners-of-2019-prose-awards/#social%20sciences

Awards

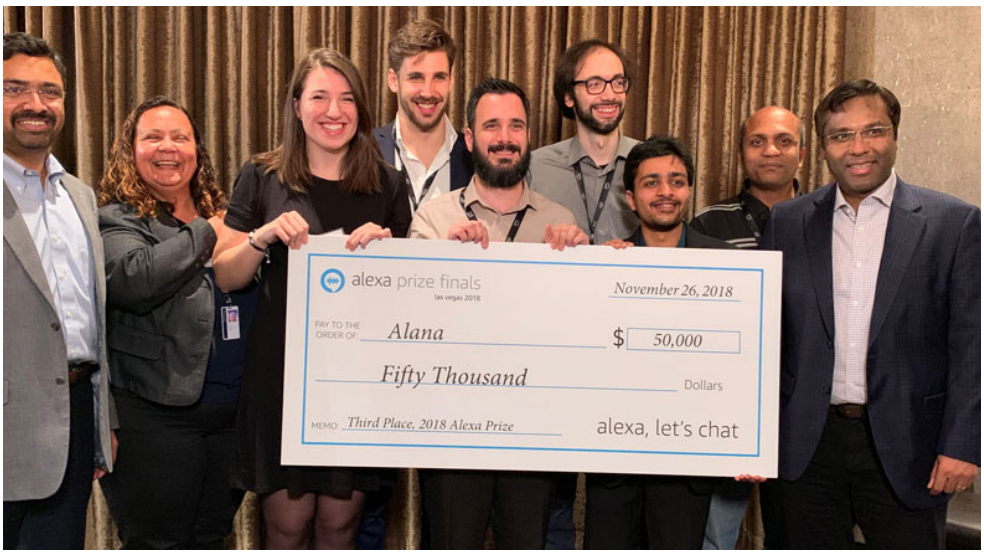
A team of Verena Riser's students from Heriot Watt University have been successful in the Amazon Alexa Prize Competition.

The team comprised of Amanda Curry (Team Lead), Alessandro Suglia, Igor Shalyminov, Ioannis Papaioannou, Xinnuo Xu and Shubham Agarwal.

Faculty advisors were Oliver Lemon and Verena Rieser.

Read more :
https://www.hw.ac.uk/about/news/2018/heriot-watt-world-leading-in-robotics-and-ai.htm

https://developer.amazon.com/alexaprize/2018/alana



Top journals, conference papers and publications

Awards & Funding

Caroline Jay, University of Manchester has been made a Fellow of the Alan Turing Institute.

Caroline Jay, University of Manchester, received funding for a two-year research project examining the interaction between human health and the environment.

Recent publications from Alessio Lomuscio, Imperial College London:

M. Akintunde, A. Kevorchian, A. Lomuscio, E. Pirovano. Verification of RNN-Based Neural Agent-Environment Systems.Proceedings of the 33th AAAI Conference on Artificial Intelligence (AAAI19). Honolulu, HI, USA. AAAI Press.

F. Belardinelli, A. Lomuscio, V. Malvone. An Abstraction-based Method for Verifying Strategic Properties in Multi-agent Systems with Imperfect Information. Proceedings of the 33th AAAI Conference on Artificial Intelligence (AAAI19). Honolulu, HI, USA. AAAI Press.

M. Akintunde, A. Lomuscio, L. Maganti, E. Pirovano. Reachability Analysis for Neural Agent-Environment Systems. Proceedings of the 16th International Conference on Principles of Knowledge Representation and Reasoning (KR18). Tempe, Arizona. AAAI Press. To Appear.

F. Belardinelli, A. Lomuscio, V. Malvone. Approximating Perfect Recall when Model Checking Strategic Abilities. Proceedings of the 16th International Conference on Principles of Knowledge Representation and Reasoning (KR18). Tempe, Arizona. AAAI Press. To Appear.

P. Kouvaros, A. Lomuscio, E. Pirovano. Symbolic Synthesis of Fault-Tolerance Ratios in Parameterised Multi-Agent Systems. Proceedings of the 27th International Joint Conference on Artificial Intelligence and 23rd European Conference on Artificial Intelligence (IJCAI-ECAI18). Stockholm, Sweden. AAAI Press. To Appear.

Recent publication from Francesca Toni, Imperial College London:

Q.Zhonga, Institute of Guangdong Hong Kong, X.Fan, Swansea University, X.Luo, Guangxi Normal University and F.Toni, Imperial College London, recently published a paper entitled “An explainable multi-attribute decision model based on argumentation” in the
Expert Systems with Applications Journal.
Volume 117, 1 March 2019, Pages 42-61

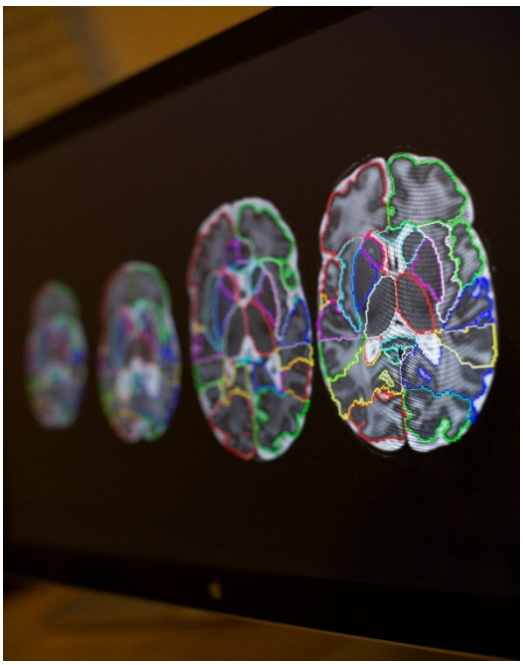
Read more:
https://ac.els-cdn.com/S0957417418306158/1-s2.0-S0957417418306158-main.pdf?_tid=ec99e0b2-e831-41dc-b5e9-52fb623939f0&acdnat=1547030649_ad690cb6acbed322fee140877a09caa3
arch 2019, Pages 42-61

“This community will be built around the development of new theory, implementations and applications of HLC.”

Caroline Jay – The University of Manchester

Events, seminars, competitions and key note talks

In this year's Annual BCS Turing Lecture, Krishna Gummadi will discuss the issues with bias in AI in his talk 'Engineering A Fairer Future'. Caroline Jay is this year's Insight Speaker at the Manchester event, where she will be discussing what training a machine to classify behaviour can tell us about the way the human mind works, in her talk, 'Spot the difference'. Caroline's talk is taking place on 20th February 2019.



The primary academic beneficiaries will be those working in the Artificial Intelligence and Psychology communities involved in developing inter-disciplinary research towards the aims of Human-Like Computing

Events

Stephen Muggleton, Imperial College London is hosting a workshop on Friday 26th April 2019 in the Department of Computing, Imperial College London.

The workshop, supported by the EPSRC's Network on Human-Like Computing, is the UK's first on Third Wave Artificial Intelligence.

Third wave AI is DARPA's term for its upcoming programme of research in areas which go beyond the limitations of first wave AI (expert systems) and second wave (deep learning).

https://www.darpa.mil/program/explainable-artificial-intelligence

Third Wave AI is envisaged as consisting of Cognitive Architectures with the following attributes.

o General learning ability

o Real-time, interactive learning

o Self-directed learning

o Dynamic goals and context

o Transfer learning and generalisation

o Abstract reasoning and language

Admission is free although you will need to pre-register to attend. Registration will open on our website shortly.

http://hlc.doc.ic.ac.uk/events.html

Light refreshments will be available.

Mini profile

Hello everyone!

My name is Rhys Perry and I am a portfolio manager in the ICT theme at EPSRC. I am the primary EPSRC contact for the Human-Like Computing Network, therefore Stephen and Bridget have kindly given me some space to introduce myself.

First, a brief explanation of what I do - The role of an EPSRC portfolio manager is to develop, implement and manage a portfolio of research and activities acting as a focal point between EPSRC and the external research community, and to support the delivery of EPSRC's strategic objectives.

My relation with the HLC network stems from my responsibility for the "New and Emerging Areas in ICT" EPSRC priority. EPSRC sees HLC as an important and exciting research topic and we wish to assist the network in developing a strategy for progressing discussions around defining and designing human-like systems to facilitate world leading research in AI, and consolidate an area of strength for the UK. In addition to this we want to support the HLC network's objective to engage with SMEs to accelerate the impact of research in the area. Furthermore at EPSRC we encourage cross-disciplinary work and emphasise responsible innovation and I feel that the nature of HLC research, requiring collaboration of the AI and Psychology communities, lends itself to establishing an example of best practice in these areas.

I look forward to meeting you all at future HLC events.

Rhys Perry

EPSRC Portfolio Manager

EPSRC Engineering and Physical Sciences Research Council

WARWICK THE UNIVERSITY OF WARWICK

Imperial College London