Dec 02, 2015 12:33 GMT

The future of artificial intelligence: Northumbria academic publishes latest research

A Northumbria academic looking for the next breakthrough in artificial intelligence and machine learning has been praised after a trio of high-profile research publications.

Professor Ling Shao, who previously worked as a senior scientist for Philips Research in Eindhoven, recently published a series of articles in prestigious research journals, including one rated in the top 3% in the field of artificial intelligence. The academic, who joined Northumbria's Department of Computer and Digital Technologies just over 12 month ago, specialises in Computer Vision, Machine Learning, Pattern Recognition, Data Mining, and Image/Video Processing.

Professor Shao said: "My research team at Northumbria is working on various topics such as deep learning, attributes learning, transfer learning, person re-identification, facial age estimation, cross-modal image retrieval, human activity recognition and image description using natural language.

"What excites me about this field is our research will lead to numerous applications related to our daily life such as video surveillance, security, robotics, Internet search and retrieval, and healthcare."

Professor Shao's research team is working topics including deep learning, person re-identification, facial age estimation, cross-modal image retrieval, human activity recognition and image description using natural language. The team's work informs teaching across the department, ensuring students

benefit from this latest cutting-edge research.

He said: "Our research is directly related to some computer science courses at Northumbria, especially for the new pathways. Students benefit through research led teaching and the state-of-the-art research will broaden their views.

"The challenges facing this field include how to deal with the ever-growing, noisy and multimodal big data and how to make our algorithms work in real-world scenarios. On the other hand, big data, the fast developing computing power and real-world applications will create a lot of opportunities in the field of Computer Vision, Machine Learning and Artificial Intelligence."

Professor Shao, who leads the University's Computer Vision and Artificial Intelligence Group, added: "In the future, researchers in this field will try to understand how the human brain works and design AI algorithms that have the abilities close to a human being."

Colleagues at Northumbria, including senior lecturer [Dr Hubert Shum](), have praised Prof Shao's recent publications as well as the achievements of the research team he leads.

Dr Shum said: "Northumbria has shown its great potential in research, especially in the subject of computer science. Over the past few years since I have worked here, I can see that the academic profiles of staff members have dramatically improved.

"Our research team led by Prof Shao has made a significant achievement last year, and has made a name in the computer vision and graphics research circles. This enables us to attract further research funding and create impacts in the fields."

Those interested in reading Prof Shao's recent research papers can view them in full via his personal website [here](). Northumbria offers a range of fascinating courses in Computer Science and Digital Technologies. For more information sign up to one of our upcoming Open Days by clicking [here]() or go to:[www.northumbria.ac.uk/computerscience]()

Northumbria is a research-rich, business-focused, professional university with a global reputation for academic excellence. To find out more about our courses go to www.northumbria.ac.uk

If you have a media enquiry please contact our Media and Communications team at media.communications@northumbria.ac.uk or call 0191 227 4571.

Contacts

Rik Kendall
Press Contact
PR and Media Manager
Business and Law / Arts, Design & Social Sciences
rik.kendall@northumbria.ac.uk
07923 382339

Andrea Slowey
Press Contact
PR and Media Manager
Engineering and Environment / Health and Life Sciences
andrea.slowey@northumbria.ac.uk
07708 509436

Rachael Barwick
Press Contact
PR and Media Manager
rachael.barwick@northumbria.ac.uk
07377422415

James Fox
Press Contact
Student Communications Manager
james2.fox@northumbria.ac.uk

Kelly Elliott
Press Contact
PR and Media Officer
kelly2.elliott@northumbria.ac.uk

Gemma Brown
Press Contact
PR and Media Officer
gemma6.brown@northumbria.ac.uk