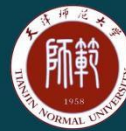# International Conference on Artificial Intelligence and the Development of Records and Archives Management

Co-host

School of Information Resource Management at RenMin University of China

Management School at Tianjin Normal University

Organizer

Management School at Tianjin Normal University

Welcome Message

Welcome!

On behalf of the School of Information Resource Management at Renmin University of China and Management School at Tianjin Normal University, it is our pleasure to welcome everyone to the International Conference on Artificial Intelligence and the Development of Records and Archives Management.

While the use of artificial intelligence in records and archives work was largely potential and experiments decades ago, they are now widely explored and investigated in archival research and practice. In embracing the power and benefits of AI to cope with the overwhelming abundance, complexity, and lack of control of records, the archival field also needs to understand the risks associated with its use, thus, making it trustworthy for the management and preservation of trustworthy records.

The School of Information Resource Management at Renmin University of China and the Management School at Tianjin Normal University co-host this conference to disseminate the knowledge generated by the InterPARES Trust AI research project, of which both Schools are Partners, and to create a space for discussion around artificial intelligence and records and archives work. The I Trust AI project, which is the 5th phase of the InterPARES project, is funded until 2026 by the Social Sciences and Humanities Research Council of Canada and by the contributions of its many Partners.

It would not be possible to hold this conference without the efforts of the creative, dedicated members of the conference's organizing team. Our sincere thanks to their hard work and exceptional support.

Enjoy the conference!

Yours truly,

Yuenan Liu
Director, School of Information Resource Management at Renmin University of China

Bing Liu
Director, Management School at Tianjin Normal University

Opening Ceremony and Keynote Speech

Moderator: Yuenan Liu (Director, School of Information Resource Management at Renmin University of China)

8:00-8:20	**Opening Remarks** Huiling Feng, First-grade Professor of Renmin University of China Yinghua Zhong, President of Tianjin Normal University
8:20-8:30	**Group Photo**
8:30-9:00	**Trustworthy AI for Trusted Records and Archives** Luciana Duranti, University of British Columbia, Canada Muhammad Abdul-Mageed, University of British Columbia, Canada
9:00-9:20	**Facing AI: What We Can Do and What We Should Do** Sherry L. Xie, Renmin University of China

Session One

Chair: Zhiying Lian (Professor, School of Information Resource Management at Renmin University of China)

9:20-9:50	**Archival Theory for the Information Age** Kenneth Thibodeau, Regis University
9:50-10:10	**Critical Data Studies Meets Archival Research: On the Preservation of Digital Twin and Smart Grid Technologies** Tracey P. Lauriault, Carleton University
10:10-10:30	**AI & Records & Information Management: The Future Is Here--It's Tust Not Evenly Distributed Yet** Patricia C. Franks, San Jose State University
10:30-10:40	**Q&A**

Session Two

Chair: Ping Wang (Professor, School of Information Management at Wuhan University)

10:40-11:00 **Managing Records in Enterprise-Wide Systems and Some Artificial Intelligence Considerations**
Shadrack Katuu, University of South Africa

11:00-11:20 **Prospect on AI Applications**
Guanwen Yang, Beijing MiiVii Dynamics Technology CO., LTD

11:20-11:40 **Identification of Retention Period of Digital Archives Based on Deep Learning**
Jianliang Yang, School of Information Resource Management at Renmin University of China

11:40-11:50 **Q&A**

Session Three

Chair: Linqing Ma (Associate Professor, School of Information Resource Management at Renmin University of China)

13:00-13:20 **Archives and AI: The Chinese Perspective**
Weimei Pan, Tianjin Normal University

13:20-13:40 **Artificial Intelligence Technology Boosts the Transformation of Digital Intelligence in Archives**
Jinshui Hu, iFLYTEK CO., LTD

13:40-14:00 **Archival Challenges to Be Improved By AI**
Hrvoje Stancic, University of Zagreb

14:00-14:10 **Q&A**

Session Four

Chair: Yanhua Zhang (Associate Professor, School of Public Affairs at Zhejiang University)

14:10-14:30   **AI in the Middle Age: Parchment Arrangement Via Appearance-Based Recognition**
Emanuele Frontoni, University of Malta

14:30-14:50   **Can Machines Classify Records Better than Humans?**
Umi Mokhtar, Universiti Kebangsaan Malaysia

14:50-15:10   **Application of Big Data and Artificial Intelligence in Intelligent Manufacturing**
Zheng Wang, College of Intelligence and Computing at Tianjin University

15:10-15:30   **Exploration and Application of Knowledge Mining in Intelligent Archives**
Yu Nie, Beijing Hanvon Digital Technology CO., LTD

15:30-15:40   Q&A

Closing Ceremony

15:40-15:50   **Closing Remarks**
Bing Liu, Director of Management School at Tianjin Normal University

Luciana Duranti

Dr. Luciana Duranti, a graduate of Sapienza University of Rome, Italy, is a Professor of archival theory, diplomatics, and digital records in the master's and doctoral archival programs of the School of Information of the University of British Columbia (UBC), Vancouver, Canada and the Principal Investigator and co-director of I Trust AI. She is Director of the UBC Centre for the International Study of Contemporary Records and Archives and the Principal Investigator of the InterPARES research project, which, since 1998, has developed theory and methods for the creation, maintenance and preservation of trustworthy digital records across technologies.

Muhammad Abdul-Mageed

Dr. Muhammad Abdul-Mageed is Canada Research Chair in Natural Language Processing and Machine Learning at the University of British Columbia (UBC). His research focuses on deep representation learning and natural language socio-pragmatics, with a goal to innovate more equitable, efficient, and `social' machines for improved human health, safer social networking, and reduced information overload. Applications of his work currently span a wide range of speech and language understanding and generation tasks. For example, his group works on language models, automatic speech processing, machine translation, and computational socio-pragmatics in social media. Dr. Abdul-Mageed has published over 85 research papers in top venues such as AAAI, ACL, EACL, EMNLP, NAACL, and ICWSM. His lab has won several international competitions, including in machine translation, dialect processing, and social meaning understanding. Dr. Abdul-Mageed's research has been funded with over $8M by Google, Natural Sciences and Engineering Research Council of Canada, Social Sciences and Humanities Research Council of Canada (SSHRC), and Canadian Foundation for Innovation. He currently directs the SSHRC-funded I Trust AI international partnership.

Sherry L. Xie

Dr. Sherry L. Xie, MLIS (McGill University), MAS & PhD (University of British Columbia). Worked as librarian, archivist, and records manager in universities and governments in Canada and adjunct professor at the iSchool at UBC, Canada. Currently work as Professor, School of Information Resource Management, Renmin University of China; Associate Director, Center for Electronic Records Management Research; Research Fellow, Key Laboratory of Data Engineering and Knowledge Engineering, Ministry of Education of China. Recent representative publications: I-Relationships: Do We Need It or Does It at all Matter? (iConference 2020 Vision paper); with Siyi, L. and Han, R. (2022), "Competing with artificial intelligence – can the records and information management profession withstand the challenge?", Records Management Journal, Vol. ahead-of-print. https://doi.org/10.1108/RMJ-08-2021-0033.

Kenneth Thibodeau

An internationally recognized expert in management and preservation of digital information, Dr. Thibodeau has served as Director the Electronic Records Archives and of the Center for Advanced Systems and Technology at the National Archives and Records Administration, Director of the Department of Defense Records Management Task Force and Senior Guest Scientist at the National Institute of Standards and Technology in the US. A Fellow of the Society of American Archivists and winner of the Emmett Leahy Award, he has been a collaborator in all five InterPARES projects.

Tracey P. Lauriault

Dr. Tracey P. Lauriault is Associate Professor of Critical Media and Big Data, School of Journalism and Communication at Carleton University, Cross Appointed to Digital Humanities, and is board member of the Institute for Data Science. She is a critical data studies scholar who works on open data, big data, open smart cities, open government, data sovereignty, data preservation and data governance. Her ongoing research includes disaggregated equity data, digital twins, intersectional approaches to data governance, data invisibilities and the history of the census. As a publicly engaged scholar, she mobilizes her research into data and technology policy in all sectors. As a data and technological citizen, she examines large and small complex systems with the hope of making them more just, inclusive, equitable and environmentally sustainable.
https://orcid.org/0000-0003-1847-2738

Patricia C. Franks

Dr. Franks, Professor Emerita at San José State University, teaches courses in Enterprise Content Management and Digital Preservation. She is a Certified Archivist, Certified Records Manager, Information Governance Professional, and Certified Information Governance Officer. Dr. Franks is co-editor, along with Dr. Luciana Duranti, of the Encyclopedia of Archival Science and the Encyclopedia of Archival Writers, 1515-2015. She is co-editor, along with Dr. Anthony Bernier, of the International Directory of National Archives. Dr. Franks is also sole author of Records and Information Management now in its second edition. Her most recent publication, The Handbook of Archival Practice, was released in September 2021. Her research interests lie in emerging technologies, including artificial intelligence and blockchain distributed ledger technology, and their impact on archives, records management, and information governance.

Shadrack Katuu

Dr. Shadrack Katuu has most recently been a consultant at the Caribbean Development Bank. He has previously been an information management officer with the United Nations working in Iraq and before that an information management officer at the United Nations Mission in South Sudan. Before that he was head of the Records Unit at the International Atomic Energy Agency in Vienna

(Austria) and before that was an archives/records officer at the International Monetary Fund in Washington DC. (US). He has previously held several positions including manager of information systems in Mr. Nelson Mandela's post-presidential office at the Nelson Mandela Foundation. He has worked as information analyst at the South African History Archive in Johannesburg (South Africa). He has also been full time lecturer at the University of Botswana as well as guest-lectured in several universities in Barbados, Canada, South Africa, and the USA. He completed his Undergraduate Degree in Kenya, Masters Studies in Canada and Doctoral Studies in South Africa. He is a Research Fellow at the Department of Information Science, University of South Africa. He has authored or co-authored several peer reviewed and non-peer reviewed publications that have been cited more than 1000 times (see http://goo.gl/sJ3qBG).

Guanwen Yang

He has an interdisciplinary background in physics and materials science and holds a PhD from UCLA. During his stay in the United States, he served as president of UMKC and UCLA Chinese Student Union, and was awarded the title of "Outstanding Student Leader" by the Chinese Consulate General in The United States (Chicago). He has worked for Oplink Communications Inc, one of the world's largest suppliers of optical communication devices and modules, and was a managing director of Verition Fund Management, a Multi-strategy hedge Fund on Wall Street. He was participated in several investments in artificial intelligence and communication industries. In 2015, he returned to China and founded an embedded artificial intelligence company -- Beijing MiiVii Dynamics Technology CO., LTD., which has raised over 100 million RMB and has become one of NVIDIA's recommended partners globally.

Jianliang Yang

He is a lecturer and a postdoctoral fellow in the School of Information Resource Management of Renmin University of China, and he is jointly trained as a doctor by Renmin University of China and MIT.He is also a researcher at Electronic Document Management Research Center of Renmin University of China, Digital Humanities Research Center of Renmin University of China and Archives Development Center of Renmin University of China. His research interests are document digitization and natural language processing.

Weimei Pan

Dr. Weimei Pan is a lecture in the School of Management at Tianjin Normal University where she currently teaches courses on diplomatics and electronic records management. She earned her PhD from the University of British Columbia (UBC) in 2019, where she focused on the management of records as evidence and information in the context of cloud-based services in China. Her research interests include diplomatics in China, records management, archival education, and the protection and demonstration of records as legal evidence. Her current research focuses on the management of electronic records so that they can be admitted in litigations in the Chinese context and diplomatics in China.

Jinshui Hu

His research interests include graphic recognition, virtual image interaction, video face, multimodal vision, unmanned driving, etc.He presided over the continuous handwriting recognition system and scene character recognition system in iFLYTEK CO., LTD.The research results have been applied to many practical systems and products in iFLYTEK CO., LTD, such as full-text recognition of historical archives, intelligent electronic files, all-subject marking, translation machines, learning machines, handwritten books, etc.Many of his research achievements have reached the international advanced research level.

Hrvoje Stančić

Dr. Hrvoje Stančić is full Professor and Chair of Archival and Documentation Sciences at the Department of Information and Communication Sciences as well as Vice-Dean for Organization and Development at the Faculty of Humanities and Social Sciences, University of Zagreb, Croatia. He was Director of the InterPARES Trust project's Team Europe (2013-2019). Currently, he is member of the Research Committee at the InterPARES Trust AI project (2021-2026). He has published more than 80 scientific and professional papers and has presented at numerous conferences.

He edited the book Trust and Records in an Open Digital Environment (2021), published the book Digitisation (2009), co-authored Archival Science Dictionary: English-Croatian, Croatian-English (2015). He co-edited the book Heritage Live: IT Tools-based Heritage Management (2012) and six proceedings of the biennial international conference The Future of Information Sciences (INFuture). His research interests are long-term preservation of digital archival materials, preservation of authenticity and trustworthiness of digital records, blockchain, AI as well as digitisation. He is member of the board of Croatian Archival Society and President of the mirror technical committee for development of ISO/TC 307 Blockchain and distributed ledger technologies at the Croatian Standards Institute. In October 2021 he was awarded bronze medal at the 19th International Innovation Exhibition for his innovation TrustChain – A System for Preservation of Trustworthiness of the Digitally Signed Documents.

Emanuele Frontoni

Dr. Emanuele Frontoni is currently a Full Professor of computer science with the University of Macerata and the Co-Director of the VRAI Laboratory at the Marche Polytechnic University. His research interests include computer vision and artificial intelligence with applications in robotics, video analysis, and human behavior analysis, and the automatic classification of images. He is also involved in several e-mobility projects in the field of data interoperability, cloud-based technologies, and big data analysis. He coordinated and participated in several industrial research and development projects in collaboration with ICT and mechatronics companies in the field of ambient assisted living. He is a member of the European Association for Artificial Intelligence, the European AI Alliance, and the International Association for Pattern Recognition. He served as expert for the EU Commission in the AI H2020 and Horizon Europe Calls and he is currently co-speaker of the European IPEI CIS (Important Project of Common European Interest - Cloud Infrastructure and Services) for the AI services of the next generation of European cloud – edge services.

Zheng Wang

Dr. Zheng Wang is now a professor in College of Intelligence and Computing, Tianjin University. He once was a visiting scholar of INRIA institute, France, from 2007 to 2008. His current research interests include machine learning and computer vision. He is the head of high-dimensional data analysis and system laboratory, the backbone member of Tianjin Key Laboratory of machine learning and data mining and machine learning of Tianjin University, 131 innovative talents of Tianjin, and a key member of CCF TC-Multimedia Technology.

Umi Asma Mokhtar

Dr. Umi Asma' Mokhtar is a senior lecturer of information science at the Research Center for Cyber Security, Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia. She was the recipient of the Oliver Wendell Holmes Travel Award from the Society of American Archivists in 2012. Her research interests are electronic records management, function-based classification, and information policy. She is a committee member for the Development of Malaysia Standard ISO/TC 46, particularly NSC Y/TC 009 "Records Management". As an academician in records and information management, she has delivered speeches at international level and short courses to government institutions. Her papers have been published in international and national journals including the International Journal of Information Management and Records Management Journal. Currently, she is the lead researcher of InterPARES Trust AI (ITrustAI) project for Malaysian Team.

Yu Nie

He graduated from the Computer Science Department of Wuhan University in 1996.He owns five invention patents from many countries and 17 scientific research papers, and has made many R&D achievements in natural language processing technology, machine learning and artificial intelligence technology, big data technology and large-scale distributed software system design.