Dublin Core Data Institute
An International Conference

October 19, 2024

DCMI 2024

METADATA INNOVATION:
TRUST, TRANSFORMATION, AND HUMANITY

October 20–23, 2024

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UNIVERSITY OF TORONTO
FACULTY OF INFORMATION

DATA SCIENCES INSTITUTE

OSF

Taxonomy Strategies
The Business of Organized Information

Greetings

Welcome to the 2024 DCMI Conference: "Metadata Innovation – Trust, Transformation, and Humanity."

It is my pleasure to warmly welcome you to the 2024 DCMI Conference. As a community, the Dublin Core Initiative continues to lead the charge in advancing metadata interoperability by harnessing the power of data and cutting-edge IT solutions. We are excited to have you join us for this pivotal and dynamic event.

Our program features three captivating keynote presentations, each closely aligned with the latest innovations and impacts of AI on societal and IT landscapes through metadata and ontology. First, Professor Richard Marciano from the University of Maryland will deliver a keynote on "Teaching Computational Archival Science: Context, Pedagogy, and Future Directions in Metadata." Following this, Samuel Kai Wah Chu from the Hong Kong Metropolitan University will present on "Co-constructing Data by Humans and Generative AI." Concluding the keynote series, Haliza Jailani from the National Library Board Singapore will explore the intricacies of "Working the Data."

In addition to these keynotes, the conference will feature a rich array of invited panels, presentations, academic papers, tutorials, workshops, best practice showcases, a student forum, and essential community updates.

We would also like to extend our sincere gratitude to the University of Toronto, Faculty of Information, for hosting the DCMI 2024 Conference. Special thanks to our sponsors, Open Science Framework and Taxonomy Strategies, for their invaluable support and collaboration.

We are confident that your participation in this conference will be both enriching and rewarding, contributing to the continued growth of our shared community. We eagerly await your presence at the DCMI 2024 Annual Conference!

Sam Oh

Executive Director, Dublin Core Metadata Initiative
Distinguished Professor for Global Affairs, Sungkyunkwan University

Greetings

Welcome to the joint DCDI and DCMI conferences, held this year at the University of Toronto, an institution renowned for its interdisciplinary excellence and fostering of connections between different fields. To take just one example, the Faculty of Information is proud to be home to the Centre of Culture and Technology, which, as its name implies, directly links two massively important but different domains, namely information technology and art and cultural studies.

Given U of T's deep focus on technology as well as the humanities and social sciences, I can say confidently that we are in a setting that is uniquely well-suited for our discussions on data and its impact across disciplines. And, of course, you are here at an especially beautiful time of year. I can only hope the weather cooperates and you see the campus in all its fall glory.

Our decision to co-locate the DCDI and DCMI conferences underscores what I hope will become a strong connection between these two forums. DCMI has long been a leader in data exchange, interoperability and metadata innovations, while the new Dublin Core Data Institute aims to explore the specific challenges of data sharing in the humanities and social sciences. By bringing these two conferences together, we are creating a collaborative platform that benefits from the shared expertise of all participants. And we look forward to discussions that bridge disciplines and advance the understanding of data's role in enhancing research and knowledge sharing.

 The core goal of this inaugural DCDI conference is to establish an international consortium that connects humanities and social science research centers worldwide. Our aim is to share practices, collaborate, and address the challenges of selecting, collecting, and utilizing data for scholarship. We are excited to cultivate meaningful relationships that will contribute to the future of data-driven research in these fields.

Thank you for joining us, and we look forward to two inspiring and productive conferences.

Javed Mostafa

Javed Mostafa

Conference Chair
Professor and Dean
Faculty of Information, University of Toronto

Dublin Core Data Institute (DCDI): An International Conference
Saturday, October 19 / 08:00 ~ 17:20

Time	Session	Speakers	Moderators
08:00 - 09:00	Registration		
09:00 - 09:15	**Welcome**		Javed Mostafa
09:15 - 10:15	**Opening Keynote**: Artificially Intelligent: Human Creativity in the Age of AI	Martin Puchner	Sam Oh
10:15 - 10:35	Coffee Break		
10:35 - 11:35	**Panel:** Defining Critical Data Services	Jeff Good, Martin Puchner, Alan Christy, Claire Battershill	Javed Mostafa
11:35 - 12:15	**Student Poster Presentations**		
12:15 - 13:15	Lunch		
13:15 - 14:15	**Panel:** International Data Consortium	Wind Cowles, Dennis Yi Tenen, Tom Cramer, Sophy Chen	Javed Mostafa
14:15 - 14:45	Coffee Break		
14:45 - 15:45	**Lightning Talk:** DH Centers & Initiatives		Javed Mostafa
15:45 - 16:00	Coffee Break		
16:00 - 17:00	**Closing Keynote**: The Myth of Creativity: Text Generators in Fiction	Dennis Yi Tenen	Javed Mostafa
17:00 - 17:20	**Closing Ceremony**		Javed Mostafa Sam Oh

DCMI 2024 DAY 1
Sunday, October 20 / 09:00 ~ 17:00

DCMI 2024 Tutorial & Workshop				
Time	**Session**	**Speakers**	**Title**	**Moderator**
08:00 - 09:00 (Ground Floor)	Registration			
09:00 - 10:30 (BL 313)	Tutorial 1	Phil Barker Karen Coyle	Dublin Core Tabular Application Profiles	Inkyung Choi
10:30 - 11:00	Coffee Break			
11:00 - 1:00 (BL 313)	Tutorial 2	John Kunze	ARK Persistent Identifiers	Inkyung Choi
13:00 - 14:00 (Learning Hub, 4th Floor)	Lunch			
14:00 - 15:30 (BL 313)	Workshop	Daniel Hruschka	Using CatMapper	Inkyung Choi
15:30 - 16:00	Coffee Break			
16:00 - 17:30 (BL 313)	Workshop (Continued)	Daniel Hruschka	Using CatMapper	Inkyung Choi

NKOS Workshop				
Time	**Session**	**Speakers**	**Title**	**Moderator**
8:00 - 10:00 (Ground Floor)	Registration			
10:00 - 10:15 (BL 205)	Introduction			Joseph Busch
10:15 - 11:45 (BL 205)	Session 1	Shu-Jiun Chen	Leveraging Generative AI for Multilingual Thesaurus Development: Insights from the Confucius Ceremony Cultural Vocabulary	Joseph Busch
		Cuijuan Xi	The Ontology enhanced multimodal large language models for the Knowledge Organization and Representation of multi-modal cultural memory resources	
		Rafael Leal Annastiina Ahola Eero Hyvönen	Using LLMs for Enriching Metadata with Links to KOS and Knowledge Graphs: Case Finnish Named Entity Linking	
11:45 - 12:00	Coffee Break			
12:00 - 13:00 (BL 205)	Session 2	Irene Onyancha Ahmed Al-Awah Fraser Gordon Rofaida Elzubair	The African Knowledge Hub: Role of the SDG taxonomy (KOS) in harnessing, exploring, and navigating knowledge of the United Nations System - Africa	Joseph Busch
		Wei Hu Shuying Li Ning Yang	Patent citation link prediction based on graph neural network	
13:00 - 14:00 (Learning Hub, 4th Floor)	Lunch			
14:00 - 15:30 (BL 205)	Session 3	Dong Whi Yoo Koustuv Saha	Exploring Patient Perspectives on Anticipating and Mitigating Potential Harms of LLMs in Depression Self-Management	Joseph Busch
		Qiaoyi (Joy) Liu Jian Qin	Testing use of an LLM algorithm on Gene Ontology (GO) dataset	
15:30 - 15:45	Coffee Break			
15:45 - 16:45 (BL 205)	Session 4	Brian Dobreski Chris Hastings	Evaluating AI Assignment of Library of Congress Subject Headings (LCSH)	Joseph Busch
		Trevor Watkins	Mapping the Global AI Landscape using AI and KOS	
16:45 - 17:00 (BL 205)	Announcements & Closing			

DCMI 2024 DAY 2
Monday, October 21 / 09:00 ~ 20:00

Time	Session Title	Speakers	Title	Moderator
8:00 - 9:00 (Auditorium)	Registration			
9:00 - 9:30 (Auditorium)	Welcome			Ayoung Yoon
9:30 - 10:30 (Auditorium)	Keynote	Richard Marciano	Teaching Computational Archival Science	Sam Oh
10:30 - 11:00 (Auditorium)	Coffee Break			
11:00 - 12:00 (Auditorium)	Invited Talk	Marjorie MK Hlava	Updating a Core Metadata Standard	Alasdair MacDonald
12:00 - 13:00 (Auditorium)	Invited Talk	Tom Baker	Tabular Data to RDF and Data Shapes	Alasdair MacDonald
13:00 - 14:00 (Auditorium)	Lunch			
14:00 - 15:30 (Auditorium)	Panel: Cultural Heritage in the New Age of AI	Marcia Lei Zeng	Introduction: Recent research projects for generating smart data for diverse CH entities in the New Era of AI	Sam Oh
		Eero Hyvönen	Digital Humanities on the Semantic Web	
		Shigeo Sugimoto	Metadata modeling based on the One-to-One Principle to digitally curate and archive intangible entities in the cultural and historical domains	
		Sophy Shu-Jiun Chen	Structuring Knowledge from Qing Secret Societies	
15:30 - 16:00 (Auditorium)	Coffee Break			
16:00 - 17:30 (DSI Seminar room)	Papers: Metadata, Archives, Visual and Music	Boyoung Kim	Analysis of Issues When Creating OAIS-based Archival Information Packages: Through an Exploratory Survey Using an Online Questionnaire	Joseph Busch
		Alison Day	Queering archival metadata? The discoverability of queer collections in GLAM institutions and universities in Aotearoa/New Zealand	
		Romina Soledad Romay	Musical composition using metadata	
		Vyacheslav Zavalin	Exploring Accuracy, Completeness, and Consistency of Student-Created VRA Core 4.0 Paintings Metadata	
16:00 - 17:30 (Auditorium)	Panel	Kat Timms, Aliyan Haq, Matthew Moore, Marissa Paron, Michael I Mohammed	Managing Metadata in the Public Sector	Michael I Mohammed
17:30 - 18:30 (DSI Hallway)	Posters	Karen Coyle	OpenWEMI - A minimally constrained vocabulary for Work, Expression, Manifestation, and Item	
		Trevor Stratton	Managing Metadata Mapping	
		Sangoh Na	Linked Data Bibliographic Description Based on User Search Behavior	
		Jack O'Malley	Beyond OpenRefine: Assessing and Improving Name Reconciliation Strategies for Linked Data	
		Marina Morgan	AI and Metadata: Bridging the Gap between Digital Images and Human Understanding	
		Mark Offtermatt, Megan Rose Kilidjian	Future-proofing Metadata at Los Alamos National Laboratory	
		Richard Parish	Optimizing metadata enhancement workflow of current research information system via CrossRef – pilot study for a real-life project	
		Matyas Bohacek	Compliance Rating Scheme: Data Provenance for Dataset Use in Generative AI Applications	
		Natalia Hernández Mejías, José J. Morales Benítez	A Community-Centric Approach to Bilingual Metadata and Ethical Representations in Oral History	
		Jesse A. Johnston, Max Eckard	Encoding Reparative Description: Promoting Archival Metadata Repair through Visualization and ArchivesSpace	
18:30 - 20:00 (Auditorium)	Social Dinner			

DCMI 2024 DAY 3
Tuesday, October 21 / 09:00 ~ 19:00

Time	Session	Speakers	Title	Moderator
08:00 - 9:00 (Auditorium)	Registration			
09:00 - 10:00 (Auditorium)	Keynote	Samuel Kai Wah Chu	Co-constructing data by human and Generative AI	Sam Oh
10:00 - 10:30 (Auditorium)	Coffee Break			
10:30 - 11:30 (Auditorium)	Invited Talk: Global (Meta)data Standards	Marcia Lei Zeng	Development Status and Trends of Global (Meta)data Standards — A Report on New & Notable Efforts in the 2020s	Jian Qin
11:30 - 13:00 (Auditorium)	Panel : AI for Metadata Research and Practice	Ying-Hsang Liu	Application of AI Topic Modelling Techniques for Digital Humanities Courses across Countries	Ying-Hsang Liu
		Lu An	The application of AI in metadata research in an uncertain environment	
		Chuanming Yu	Knowledge Graph ALignment and Its Applications	
13:00 - 14:00 (Auditorium)	Lunch			
14:00 - 15:30 (Auditorium)	Panel : AI for Metadata Research and Practice	Yunhyong Kim	AI for Metadata and Content Generation in Cultural Organisations	Ying-Hsang Liu
		Kiley Jolicoeur	Ethical considerations in integrating AI tools in metadata description	
		Francisco Carlos Paletta	Artificial Intelligence Applied in Descriptive Representation in Digital Libraries	
14:00 - 15:30 (DSI Seminar room)	Project Reports	Kaylin Blount, Jim Hahn	From linked data editors to the Alma ILS: A case study of BIBFRAME interoperability	Alasdair MacDonald
		Timothy Provenzano, Rachel Fernandez, Chad Deets, Deirdre Kirmis	Using AI to Facilitate Discoverability and Curation of the ASU Library Repository Collections	
		Chai Miaoling	FAIR Principle : Make the Multimodal Data in Science & Technology Linkage Research Reliable	
		Rachel Barber-Pin, Yasuko Enosawa	Structuring Hansard transcripts into interoperable and reusable data	
		Charlene Chou	The Impact of AI on Metadata: AI Study Group for Learning and Interdisciplinary Collaboration	
		Carley Meredith	Representing Data Use Restrictions in Descriptive Metadata	
		John Huck, Luc Fagnan	Harmonizing Local Metadata Practices for Library Resources on the Internet Archive	
15:30 - 16:00 (Auditorium)	Coffee Break			
16:00 - 17:30 (Auditorium)	Panel	Trond Aalberg, Athena Salaba, Shigeo Sugimoto, Maja Žumer	Conceptual Modeling to Practical Implementation	Athena Salaba
16:00 - 18:00 (DSI Seminar room)	Papers: Metadata Quality Challenges	Richard Wallis	A Semantic Knowledge Graph Aggregation of Library Resources	Marie-Claude Côté
		Sheikh Faisal Rashid	Learning Resources Metadata: Opportunities and Challenges in the German "Innovationswettbewerb INVITE" Program	
		Li Yang	Data description in data repositories: metadata schemas for social sciences	
		Genevieve Milliken, Michelle Yee	Distributed Community, Centralized Tool: Metadata as Connection	
		Fatimah Jibril Abduldayan	Towards a Reliable Metadata: Enhancing Data Integrity of Institutional Repositories in the Era of Information Explosion in Nigeria	
18:00 - 19:00 (Auditorium)	DCMI Community Update			Alasdair MacDonald

DCMI 2024 DAY 4
Wedneday, October 23 / 09:00 ~ 18:00

Time	Session Title	Speakers	Title	Moderator
08:00 - 9:00 (Auditorium)	Registration			
9:00 - 10:00 (Auditorium)	Keynote	Jailani Haliza	Working the Data : NLB Singapore's perspective on moving the needle	Sam Oh
10:00 - 10:30 (Auditorium)	Coffee Break			
10:30 - 12:00 (Auditorium)	Panel	Inkyung Choi, Jessica Yi-Yun Chen, Anne Washington, Josh Falconer	Metadata provenance and explainability	Inkyung Choi
12:00 - 13:00 (Auditorium)	Invited Talk	Yunkeum Chang	Why Digital Humanities	Sam Oh
13:00 - 14:00 (DSI Seminar room)	Lunch			
14:00 - 15:30 (DSI Seminar room)	Papers: Metadata Quality Solutions	Mahiro Irie	An LLM Based Method for Domain Specific Mapping of Metadata Terms to a Thesaurus	Inkyung Choi
		Jim Hahn	Synthetic Signal Identification in LLM Datasets	
		Andrea Gazzarini	Leveraging Linked Data Fragments for enhanced data publication: the Share-VDE case study	
		Ashwin Nair	Metadata Enrichment with Named Entity Recognition using GPT-4	
14:00 - 15:30 (Auditorium)	Best Practices	Karen Coyle	Dublin Core Application Profiles	Marie-Claude Côté
		Guang YANG, Jie ZHANG	From Knowledge Organization to Smart Data -- Designing and publishing of Yungang Studies Ontology basing on Chinese Yungang Grottoes studies	
		Kevin Palendat	Dublin Core and specialized metadata for the Web and Social Media Preservation Program and the Government of Canada Web Archive (GCWA)	
		Ahjin Lee	NLK's Plan for Transition to Metadata Framework Based on Linked Data	
		Mike Dunkley	Balancing Great User Experience with Software Limitations: A Geospatial Ontario Example	
15:30 - 16:00 (Auditorium)	Coffee Break			
16:00 - 17:30 (DSI Seminar room)	Panel	Tom Cramer, Rochelle Lundy	Open Research Information and Metadata	
16:00 - 17:30 (Auditorium)	Best Practices Continued	Kosuke Tanabe	Cross-searching of datasets by linking repository and vocabulary management in material data platform	Marie-Claude Côté
		Kat Timms, Matthew Moore	A case study on archival records and their metadata: from department to archive to public access	
		Ning Yang, Wei Hu	Identifying and measuring the characteristics of research data reuse behavior and diffusion rules in scientific literature	
		Joseph Busch	The African Development Bank SANKOFA Program	
		Richard Wallis	A Linked Data Model for Entity Aggregation	
17:30 - 18:00 (Auditorium)	Closing Ceremony	Tom Baker, Javed Mostafa		Ayoung Yoon