



CENTRAL LIBRARY

3 DAYS INTERNATIONAL CONFERENCE – CLSTL 2025 PARTICIPATION REPORT

PREPARED BY:

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Title: Artificial Intelligence and Libraries – Opportunities, Challenges, and the Future

Venue: Indian Institute of Technology Gandhinagar (IITGN), Gujarat, India

Dates: 25 – 27 September 2025

Introduction -

Dr. Mahesh Solanki, Librarian, attended the Three-Day International Conference of CLSTL (Changing Landscape of Science & Technology Libraries) held at IIT Gandhinagar. The event served as a significant platform for library and information science professionals, academicians, and researchers from India and abroad to deliberate on the latest developments, challenges, and innovations in library services and scholarly communication.

Day 1 – 25 September 2025

Programme Coordinator of the Day: Mr. Saroj Das, Institute for Plasma Research (IPR), Gandhinagar

Inaugural Session

The inaugural session set the tone for the workshop by presenting the Collaborative Library Science and Technology Landscape (CLSTL). Dr. T.S. Kumbar outlined its scope, followed by Prof. Chetan Pahlajani's welcome address emphasising interdisciplinary collaboration. Prof. Devika Madalli, Director of INFLIBNET, underlined the importance of knowledge networks, while Prof. Vimal Mishra's presidential address placed AI in the broader context of research and innovation at IITGN. Dr. Kannan P. delivered the vote of thanks.

Learning: This session reinforced the idea that libraries are shifting from service centres to strategic partners in research ecosystems.

Keynote Address 1 (11:00 – 11:45 hrs)

Topic: **Artificial Intelligence: Past, Present and Future**

Speaker: **Anirban Das Gupta, IIT Gandhinagar**

The keynote offered a historical perspective of AI from early rule-based systems to current generative AI, and projected its future as a decision-making partner.

Learning/Example: The speaker's analogy between library cataloguing evolution and AI-driven classification systems illustrated how metadata quality underpins effective AI solutions.

Technical Session 1 (11:45 – 13:10 hrs)

Theme: Exploring Emerging AI Tools and Technologies with a Focus on Generative AI

Chair: Shubadha Nagarkar

- From Catalogs to Chatbots: How Librarians Can Build AI for Their Libraries – Mayank Singh demonstrated chatbot prototypes using open-source frameworks.
- AI and the Information Crisis: Libraries' Role in Building Critical Literacy Skills for the Future – Neelam Bharti (virtual) argued for integrating AI literacy into information literacy.
- Reassessing Academic Literacy in Higher Education Trending with Generative AI Tools – Jooyoung Kim highlighted how generative AI changes students' approach to research.
- Product Presentation – Eclat Engineering showcased AI-based search systems.

Learning/Example: The transition from OPAC to conversational interfaces was shown as a practical path for libraries to remain relevant.

Keynote Address 2 (14:00 – 14:45 hrs)

Topic: Three Information Professional Dilemmas Posed by Generative AI

Speaker: Andrew Cox, University of Sheffield

Cox discussed ethical dilemmas: privacy, transparency, and staff skills.

Learning: This session clarified that AI adoption must be guided by professional values, not just efficiency gains.

Participants appreciated the practical demonstrations and personalized responses to their queries, making the session both informative and interactive.

Technical Sessions 2 & 3 (14:45 – 17:10 hrs)

Focus on AI's impact on library services, knowledge management, and technical services. Highlights included Neeldhara Misra's talk on AI tools for personal knowledge management, a bibliometric study of AI in library science, and Julia Gelfand & Ibironke Lawal's joint talk on AI in collection management. Cindy Elliott's presentation explored AI's role in technical services.

Learning/Example: The bibliometric mapping provided a global view of AI research in LIS, while ORCID's product presentation showed how persistent identifiers integrate with AI analytics.

Poster Presentations & Cultural Event (17:10 – 21:00 hrs)

Participants presented posters on AI applications in libraries, followed by a cultural event and dinner.

Day 2 – 26 September 2025

Programme Coordinator of the Day: Mr. Hayat Ahmad, CEPT University, Ahmedabad

Keynote Address - 3 (09:00 – 10:00 hrs)

Topic: Beyond the Buzzword: Decoding 'AI-Powered' Search

Speaker: Aaron Tay, Singapore Management University

Tay dissected what “AI-powered search” truly means and how relevance ranking, vector search, and LLM-based summarisation change discovery.

Learning/Example: Demonstration of semantic search on academic databases showed how results become concept-driven rather than keyword-driven.

Technical Session 4 (10:00 – 11:00 hrs)

Theme: AI in Information Access: Search, Retrieval, and Metadata

Chair: B.P. Prakash

Talks and short presentations explored automated knowledge organisation (Parthasarathi Mukhopadhyay), ontology alignment (Sudhier K.G. & Abhijith B.), and AI-driven academic database discovery (Vijay Kumar Verma).

Learning/Example: Koha and Dewey integration with AI-based classifiers was highlighted as a low-cost innovation for Indian libraries.

Technical Session 5 (11:30 – 13:10 hrs)

Theme: AI and Intellectual Property, Copyright, and Creative Commons

Chair: Manju Naika

Speakers addressed AI and copyright (Kalyan C. Kankanala), Creative Commons in the AI era (Shanna Hollich), and research integrity (Jay J. Bhatt, virtual). IIT (BHU) team presented on AI's impact on e-resource licensing.

Learning/Example: A key insight was that AI training data raises new licensing challenges; libraries must negotiate machine-readable licences proactively.

Technical Session 6 (14:00 – 15:30 hrs)

Theme: AI in User Experience and Engagement

Chair: Bibhuti Bhusan Sahoo

Iman Magdy Khamis (virtual) presented applications of AI in libraries. Zac Painter from Princeton described “AI affinity” initiatives across the university and plasma lab. Short presentations covered personalised library experiences (NFSU), AI for accessibility and inclusion (GB Pant Institute), and Amazon Alexa at an academic library (Savitribai Phule Pune University).

Learning/Example: The Alexa case demonstrated voice interfaces as a new access channel for library services.

Technical Session 7 (16:10 – 17:30 hrs)

Theme: AI in Libraries and Archival Practices: Present Impact and Future Prospects

Chair: Mahendra N. Jadhav

Richard Young (University of Illinois) described intelligent digitisation pipelines for archives. Natalie Meyers (ARL) spoke virtually on AI’s impact on library futures. A short presentation from Odisha team explored AI for preserving India’s cultural heritage.

Learning/Example: Seeing AI used for endangered-language OCR illustrated AI’s potential for cultural preservation.

Evening Activities: Creative and fun sessions followed by a gala dinner fostered informal networking.

Day 3 – 27 September 2025

Programme Coordinator of the Day: **Mr. Sanjay Banavar, Ahmedabad University**

Keynote Address 4 (09:00 – 09:45 hrs)

Topic: Artificial Intelligence Applications in Library and Information Services: Road Ahead

Speaker: Prof. A.R.D. Prasad, DRTC (ISI), Bangalore

Projected future AI innovations, urging libraries to move from adoption to co-creation.

Learning/Example: Predictive analytics for collection development illustrated proactive service design.

Technical Session 8 (09:45 – 11:05 hrs)

Theme: Redefining Reference Services in the Age of AI

Nikesh Narayanan described agentic AI for reference at Zayed University; San Jose State team demonstrated “Kingbot” virtual assistant. IIM Ahmedabad team presented chatbot metrics.

Learning/Example: Hybrid reference models (AI + human) emerged as sustainable.

Technical Session 9 (11:30 – 13:10 hrs)

Theme: AI for Research and Scholarly Communication

Talks covered AI-based research support (Bella Ratmelia), Open Access and AI (Colleen Campbell), detecting AI-generated text, kilo-scale research, comparative evaluation of AI tools, and 3D/VR in research dissemination.

Learning/Example: Visual citation landscape mapping allows researchers to see gaps before starting projects.

Technical Session 10 (14:00 – 15:30 hrs)

Theme: AI in Information Literacy and Instruction

Namita Santra (Monash Malaysia) showed how AI literacy can be taught alongside digital literacy. Anamika Megwalu (San Jose State, virtual) shared strategies for critical and ethical learning. Brianna Buljung & Seth Vuletich presented prompt engineering for busy STEM librarians.

Learning/Example: Assignments comparing AI-generated responses with traditional sources can build critical evaluation skills.

Panel Discussion (16:00 – 17:00 hrs)

Topic: Enhancing Library Experiences with AI

Moderator Julia Gelfand led a panel of practitioners from TCS, CSIR, IIT Delhi and IISc. They outlined success factors for moving from pilots to enterprise-wide AI strategies.

Learning/Example: TCS's knowledge management system served as a model for scalable library applications.

Concluding Session (17:00 hrs onwards)

Welcome by Dr. Kannan P., conference report by Dr. Santosh C.H., address by Chief Guest Dr. Jagdish Arora, presidential address by Prof. Pratik Mutha, and vote of thanks by Dr. T.S. Kumbar. High tea closed the workshop.

Glimpse of Three Days International Conference



Overall Reflection on the Three-Day Workshop

This three-day workshop offered a comprehensive, layered understanding of how AI intersects with libraries — from foundational concepts to advanced, practice-oriented case studies.

- Day 1 established the conceptual and ethical framework, moving from an overview of CLSTL to keynotes on AI's evolution and dilemmas.
- Day 2 showcased applications in search, access, metadata, IP, and user engagement, demonstrating the diversity of tools and contexts.
- Day 3 looked ahead to future directions, co-creation of AI solutions, and strategic roles for libraries in research, instruction, and policy.

Key cross-cutting lessons:

- AI is now a core enabler of library functions, not a peripheral tool.
- Hybrid models (AI + human expertise) deliver the best results in reference and research support.
- Ethics, licensing, and information literacy are critical to ensure that AI adoption strengthens rather than undermines librarianship's core values.
- Collaboration and co-creation with vendors, researchers, and other institutions will be essential for scaling AI responsibly.

The product demonstrations, exhibitions, and poster sessions complemented the talks by showing tangible tools ready for deployment. Cultural and social events facilitated networking, which is vital for future collaborations.

Conclusion -

The three-day international workshop on Artificial Intelligence and Libraries – Opportunities, Challenges, and the Future at IIT Gandhinagar provided an extensive exploration of AI's transformative role in library services, scholarly communication, and archival practices. Across keynotes, technical sessions, product demonstrations, and poster presentations, participants gained insights into AI-powered search, metadata management, chatbots, user engagement, ethical considerations, and hybrid AI-human service models.

Dr. Mahesh K. Solanki, Librarian of Gujarat Technological University (GTU), actively participated in the conference, engaging with global experts and innovative case studies. His involvement offered valuable exposure to emerging tools, best practices, and strategies for integrating AI responsibly into library systems. The workshop highlighted the importance of ethical adoption, co-creation with stakeholders, and leveraging AI to enhance access, research support, and information literacy. Overall, the event equipped participants, including Dr. Solanki, with actionable insights and professional networks to advance AI-enabled library services at their institutions.