



# Dr. B. R. Ambedkar University Delhi

Workshop on

# Harnessing Artificial Intelligence for Social Sciences & Humanities



12th September 2023 Silver Oak, India Habitat Centre, Lodhi Road, New Delhi





## **Patron**

Prof. Anu Singh Lather
Hon'ble Vice Chancellor
Dr. B. R. Ambedkar University

# **Organising Team**

Dr. Nitin Malik, Registrar Prof. Kartik Dave

Dr. Jyotirmoy Bhattacharya

Dr. Dinesh Taneja

Dr. Anshu Gupta

Dr. Nidhi Kaicker

Dr. Shekhar Tokas

Dr. Aakriti Grover

Shri. Sudhir Verma





### Dr. B.R. Ambedkar University Delhi

#### Workshop on

#### Harnessing Artificial Intelligence for Social Sciences & Humanities

# September 12, 2023 Silver Oak, India Habitat Centre, New Delhi

#### Overview

Dr. B.R. Ambedkar University Delhi is organising the first awareness workshop on 'Harnessing Artificial Intelligence for Social Sciences and Humanities' for its faculty members and research scholars. This event aims to delve into the intricate interplay between Artificial Intelligence (AI) and the social sciences, fostering interdisciplinary discourse and insights into AI and societal repercussions. The workshop will feature distinguished lectures and panel discussions spanning a range of themes, such as AI for New Perspectives in Higher Education & Social Sciences, AI and Social Science Research, and AI-Driven Digital Transformation and Economic and Social Change.

Al is now being used in an ever-growing range of human activities. In the present era, virtually every domain benefits from the intelligent solutions offered by the approaches, methods, and techniques of Al. Given the increasing and pervasive integration of Al across all facets of contemporary existence, it is imperative to deliberate on its integration with and implications within the realm of social sciences.

#### **Objectives**

- To raise awareness and foster interest in Al-integrated social sciences.
- To understand the significance and role of AI in higher education in general and social sciences in particular.
- To understand research integrated applications of AI.
- To understand the interdisciplinary discourses on the interplay between AI and societal transformations.





## **Programme Schedule**

Time	Event		
09:45 am - 10:30 am	Welcome Tea		
Inaugural			
	Inaugural Address		
	Prof. Anu Singh Lather Honourable Vice Chancellor		
	Dr. B.R. Ambedkar University Delhi		
10:30 am - 11:00 am	Dr. B.N. Ambeukar Oniversity Denni		
	Overview of the AI Committee at AUD		
	Prof. Kartik Dave		
	Dean, School of Business, Public Policy & Social Entrepreneurship		
	Dean, Planning Division		
	Dr. B.R. Ambedkar University Delhi		
Session 1			
11:00 am - 12:00 pm	AI for New Perspectives in Social Sciences		
Session 2			
12:00 pm - 01:00 pm	Integration of Artificial Intelligence in Social Sciences Research		
01:00 pm - 01:45 pm	Lunch		
Session 3			
	Panel Discussion on Artificial Intelligence and Social Sciences:		
01:45 pm - 04:00 pm	Exploring Interdisciplinary Frontiers in the Digital Age		
Closing			
	Vote of Thanks		
	Dr. Nitin Malik		
04:00 pm - 04:15 pm	Registrar		
	Dr. B.R. Ambedkar University Delhi		
04:15 pm - 04:30 pm	Evening Tea		





#### **Session Details**

#### Session 1: 11:00 am - 12:00 pm

Topic	AI for New Perspectives in Social Sciences
Speaker	<b>Prof. Santanu Chaudhury,</b> Director, Indian Institute of Technology Jodhpur

#### Session 2: 12:00 pm - 01:00 pm

Topic	Integration of Artificial Intelligence in Social Sciences Research
Speaker	<b>Prof. Bhabatosh Chanda,</b> Professor, Indian Statistical Institute (Retd.)

#### Session 3: 1:45 pm - 04:00 pm

Artificial Intelligence and Social Sciences: Exploring Interdisciplinary Frontiers in the Digital Age
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In an era defined by rapid technological advancements, the intersection of AI and social sciences has emerged as a compelling frontier for interdisciplinary exploration. This session offers a holistic perspective on the profound impact of AI, highlighting its role in healthcare, public policy, law, heritage preservation, and the alignment of AI with human values. As part of this session, scholars and practitioners, from diverse backgrounds shall engage in a dynamic discourse on the interplay between AI and our complex human landscape, providing insights that pave the way for a future where AI becomes an integral force driving positive change and transformation across academic, social, and ethical dimensions.

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Themes and Speakers	Artificial Intelligence in Health Care -Necessity and Dependency Prof. Ashok Choudhury, Institute of Liver and Biliary Sciences, New Delhi	
	Using Artificial Intelligence in Public Policy	
	Dr. Dweepobotee Brahma, School of AI & Data Science, Indian Institute of Technology Jodhpur	
	From Code to Courtroom: AI interface with Law and Justice	
	Prof. Lawrence Liang, School of Law, Governance and Citizenship,	
	Dr. B.R. Ambedkar University Delhi	
	Artificial Intelligence and Predictive Analytics	
	Prof. Ruchika Malhotra, Department of Software Engineering, Delhi	
	Technological University	
	Role of AI in Heritage Restoration and Preservation	
	Prof. S. Indu, Department of Electronics and Communications Engineering,	
	Delhi Technological University	
	Aligning AI with Human Values	
	Prof. Vasudha Bhatnagar, Department of Computer Science,	
	University of Delhi	





#### **Speaker Profiles**

Ashok Choudhury is a renowned medical professional, holding MBBS (Hons) and MD (Internal Medicine) degrees, along with a DM in Hepatology. He currently serves as an Additional Professor in Hepatology and Liver Transplant at the esteemed Institute of Liver and Biliary Sciences in New Delhi, India. Dr. Choudhury's expertise encompasses Liver Transplant, Artificial Intelligence, Innovation, Product Development, HCC, and Liver Failure. He is an accomplished academic editor for renowned journals and plays pivotal roles in significant research studies. Dr. Choudhury's dedication to liver research has earned him prestigious awards, including the Young Investigator Awards in 2014, 2015, and 2016 awarded by EASL (London, UK), ILTS (Seoul, Korea), and APASL (Shanghai, China), respectively, and a Fellow Research Award in 2014 awarded by AASLD, Boston, USA.

**Bhabatosh Chanda** is a retired Professor from the Indian Statistical Institute, Kolkata, and a visiting Professor at IIIT, Kalyani. With over 40 years of expertise, his research spans Digital Image Processing, Pattern Recognition, Computer Vision, Mathematical Morphology, and AI techniques in Computer Vision. Prof. Chanda has supervised 16 Ph.D. students and received numerous accolades, including the Young Scientist Medal from the Indian National Science Academy and a UNDP Fellowship. He was also awarded a Diamond Jubilee Fellowship by The National Academy of Science, India, and a post-doctoral fellowship at the University of Washington, Seattle, USA. His achievements include the Computer Engineering Division Medal awarded by the Institution of Engineers, India, and recognition such as the Vikram Sarabhai Research Award from the Physical Research Lab. He has authored 9 books and close to 100 research papers, earning him several accolades and fellowships from associations such as the National Academy of Sciences, The Indian National Academy of Engineering, and the International Association of Pattern Recognition. Most recently, he was honoured as a Fellow of the Asia-Pacific Artificial Intelligence Association.

**Dweepobotee Brahma** is an Assistant Professor at the Centre for Mathematical and Computational Economics in the School of AI and Data Science at IIT-Jodhpur. She holds a PhD in Applied Economics from Western Michigan University (2019) and specializes in applied Machine Learning, econometric techniques, and development and health economics. Dr. Brahma's research focuses on maternal and child health outcomes, child mortality and morbidity, malnutrition, immunization, health insurance, and health financing. She leverages Machine Learning and Artificial Intelligence to enhance the targeting of public policies.





**Lawrence Liang** teaches at the School of Law, Governance, and Citizenship, with a keen interest in the convergence of Law, culture, and technology. He received the Infosys Prize for Social Sciences in 2017 and has extensively written on the politics of intellectual property. Dr. Liang has been a scholar and educator at renowned institutions such as Yale University, Columbia University, and the University of Michigan.

Ruchika Malhotra is a distinguished academic and serves as the Head of the Department and Professor in the Department of Software Engineering at Delhi Technological University. With master's and doctorate degrees in software engineering from Guru Gobind Singh Indraprastha University, Delhi, India, Prof. Malhotra's accomplishments include the Raman Fellowship for post-doctoral research at Indiana University Purdue University Indianapolis, USA. She's been recognized among the world's top 2% scientists in "Artificial Intelligence & Image Processing" by Stanford University. Her dedication to research is further exemplified by her Commendable Research Awards from Delhi Technological University in 2018, 2019, 2020, and 2021. Prof. Malhotra has authored/co-authored several books and contributed significantly to software testing, software quality improvement, statistical and adaptive prediction models, and software metrics with over 200 research papers.

**S. Indu** is a distinguished scholar with a B.Tech. and M.Tech. in Electrical Engineering from the University of Kerala and a Ph.D. in Visual Sensor Networks from the University of Delhi. Since 1999, she has been a valuable member of the Electronics and Communication Engineering Department at Delhi Technological University, where she is currently a senior professor and Dean (Student's Welfare). Dr. S Indu's prolific academic career includes supervising 40 M.Tech. and 11 Ph.D. candidates, with 9 more in progress. Her research focuses on Computer Vision, Sensor Networks, and Image Processing, resulting in 2 published books and numerous chapters and publications in prestigious international journals and conferences. She has successfully led 5 sponsored projects, from organizations like the Naval Research Board and the Department of Science and Technology. Her outstanding contributions have garnered her the Commendable Researcher Award from Delhi Technological University for five consecutive years (2018-2022), as well as recognition from IEEE USA and IEEE Delhi Section, receiving Best Branch Councillor and Outstanding Branch Councillor awards.





Santanu Chaudhury is the Director of the Department of Computer Science and Engineering at IIT Jodhpur. Prior to this role, he held a distinguished position as a Professor in the Department of Electrical Engineering at the esteemed Indian Institute of Technology Delhi for an impressive 26 years. Prof. Chaudhury holds a Ph.D. from the prestigious Indian Institute of Technology Kharagpur. As an accomplished expert in the field of Computer Science and Artificial Intelligence, he has made significant contributions in several key areas including Computer Vision, Computational Intelligence, Multimedia Systems, and Robotics. With a career marked by excellence and a commitment to advancing the frontiers of technology, Prof. Chaudhury has an impressive publication record including 9 books, more than 100 journal articles, 16 book chapters, and numerous conference proceedings.

Vasudha Bhatnagar is currently a Senior Professor in the Department of Computer Science, University of Delhi. She completed her Bachelor's degree in Statistics (1982) and Master's degree in Computer Application (1985), both from the University of Delhi. After working at C-DOT for three years, she served as a Lecturer at Moti Lal Nehru College, teaching undergraduate courses in computer science. Dr. Bhatnagar completed her doctoral studies from Jamia Millia Islamia in 2001 and joined the Department of Computer Science at Delhi University in 2002. She has guided several doctoral students in the areas of Data Mining, Machine Learning, Network Science, and Text Analytics. Dr. Bhatnagar has also supervised over 50 M.Sc. research projects.

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## Dr. B. R. Ambedkar University Delhi Artificial Intelligence (AI) Committee

- Prof. C S Rai, Professor, GGSIPU
- Prof. 5 Indu, Professor, DTU
- Prof. Kartik Dave, Dean, Planning, AUD
- Prof. Ruchika Malhotra, DTU
- Dr. Jyotirmoy Bhattacharya, AUD
- Dr. Dinesh Taneja, Director, IT, AUD
- Dr. Anshu Gupta, AUD
- Dr. Nidhi Kaicker, AUD
- Dr. Shekhar Tokas, AUD
- Dr. Aakriti Grover, AUD
- Shri. Sudhir Verma, AUD



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