

Lecture Notes in Networks and Systems 1513

Mohuya Chakraborty
Shambhu Prasad Chakrabarty
Althaf Marsoof *Editors*

Proceedings of Sixth International Ethical Hacking Conference

AI and Law (eHaCON 2025)



Springer

Mohuya Chakraborty ·
Shambhu Prasad Chakrabarty · Althaf Marsoof
Editors

Proceedings of Sixth International Ethical Hacking Conference

AI and Law (eHaCON 2025)

Editors

Mohuya Chakraborty
Cybersecurity Centre of Excellence,
Institute of Engineering and Management
University of Engineering and Management
Kolkata, West Bengal, India

Shambhu Prasad Chakrabarty
University of Engineering and Management
Kolkata, West Bengal, India

Althaf Marsoof
Division of Business Law, College
of Business (Nanyang Business School)
Nanyang Technological University
Singapore, Singapore

ISSN 2367-3370

ISSN 2367-3389 (electronic)

Lecture Notes in Networks and Systems

ISBN 978-981-96-8631-5

ISBN 978-981-96-8632-2 (eBook)

<https://doi.org/10.1007/978-981-96-8632-2>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2026

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.

The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

If disposing of this product, please recycle the paper.

Analyzing the Role of Artificial Intelligence in Shaping Impulsive Buying Behavior: A Study on Consumer Decision-Making in the Online Fashion Retail Sector	319
Joysri Datta, Shweta Kishore, and Sanchita De	
Deepfakes: Navigating Ethical Concerns and Legal Frameworks	337
Ankita Roy, Shrabana Chattopadhyay, and Shambhu Prasad Chakrabarty	
AI and Law	
Machinised Mediation: Apprising the Role of Artificial Intelligence in Existing Dispute Resolution Paradigm in India	359
Prashna Samaddar and Victor Nayak	
Enhancing India's Anti-Money Laundering Framework: Transforming Integration of Explainable AI for Better Transparency and Compliance	375
Sourodip Roy, Ankan Bhattacharya, and Victor Nayak	
Use of the Autonomous Weapon System: Exploration of Its Legality in Nexus with International Humanitarian Law	401
Shrabana Chattopadhyay, Snehatit Sett, Khushi Bhagat, and Sonali Mahakud	
Predicting the Future: The Scope of Artificial Intelligence Integration in Merger Transactions with Special Reference to Due Diligence Process in India	427
Purbasha Mukherjee	
Assigning Liability for AI and IoT Decisions: Comparative Analysis Between Strict and Shared Liability as a Regulatory Framework	439
Abhishake Roy	
Automated AI Systems for Legal Compliance Monitoring in Regulated Industries	449
Rahul Vadisetty, Anand Polamarasetti, and Madhava Rao Kunchala	
Navigating 'Accountability Asymmetry' by Re-assessing Individual Criminal Responsibility: Gauging Usage of Artificial Intelligence-Driven Automated Weapon System	469
Saheli Chakraborty and Nirbindu Banerjee	
Artificial Intelligence and Law: Navigating the Convergence of Subsets	487
Prem Kumar Agarwal and Namrata Chakraborty	
Ethical Challenges and Opportunities in Artificial Intelligence: A Comprehensive Exploration	503
Raghavan Krishnasamy Lakshmana Perumal and Mohuya Chakraborty	

Machinised Mediation: Apprising the Role of Artificial Intelligence in Existing Dispute Resolution Paradigm in India



Prashna Samaddar and Victor Nayak

Abstract Artificial Intelligence has touched and transformed every aspect of human civilisation, including the dispute resolution scenario, which often is criticised for being inadequate and not justice-oriented due to bias or its cumbersome nature at the domestic level. Mediation against this backdrop, even though not a very new concept for the Indian legal system, its formal introduction through separate legislative enactments or special provisions being made for it has made it an inclusive dispute resolution model. It has brought some respite due to its ‘win-win’ situation. Still, it has also been criticised for lack of proper skill or effective resolution, especially when an impasse paralyses this ‘win-win’ model in India. In this context, introducing Artificial Intelligence (AI) creates a positive impact, especially when providing resolutions or helping with the nitty-gritty of the simple yet complicated mediation process. Still, again, the issues of lack of empathy and neutrality prevent experts from relying on AI-generated solutions or interventions. This issue becomes even more acute, especially when the laws on mediation are utterly silent on the scope of AI intervention and the validity of the AI-generated or AI-aided resolutions. The research paper examines this scope of AI intervention in the mediation process by analysing the stages at which it can be integrated to make it more robust. The paper shall also examine the legal challenges in using AI in the mediation process and how it is being done at the institutional level by the various private players offering mediation and ADR services by evaluating the model dispute resolution clauses and guidelines issued by these institutions.

Keywords Artificial intelligence · Dispute resolution system · Amicable settlement of disputes · Mediation · Mediator

P. Samaddar
Xavier Law School, St. Xavier's University, Kolkata, India

V. Nayak (✉)
Department of Law (IIIJS), University of Engineering and Management, Kolkata, India
e-mail: victor.nayak.25@gmail.com

References

1. Manchanda H (2021) Mediating the Irish way: taking an alternative approach to alternative dispute resolution in India. *AMDM* 87(Issue 1):67–93. <https://doi.org/10.54648/amdm2021005>
2. Roychowdhury P (2019) Illicit justice: aspirational-strategic subjects and the political economy of domestic violence law in India. *Law Soc Inq* 44(2):444–467. <https://doi.org/10.1017/lsi.2018.13>
3. Banerjee A (2017). Agrarian crisis and accumulation in rural India. <https://doi.org/10.1093/oso/9780198792444.003.0005>
4. Saxena S (2022). Divorce and democracy. <https://doi.org/10.1017/9781108653459>
5. Mandokhail A (2024) The transformative role of artificial intelligence in conflict resolution and peacekeeping. *Nust J Int Peace Stab* 104–109. <https://doi.org/10.37540/njips.v7i1.166>
6. Meleouni C (2023) Artificial intelligence and its impact in international relations. *J Polit Ethics New Technol AI* 2(1):e35803. <https://doi.org/10.12681/jpentai.35803>
7. Ramachandran D (2024) Artificial intelligence for legal system: jurisprudence in the digital age. *Int J Adv Acad Stud* 6(5):03–13. <https://doi.org/10.33545/27068919.2024.v6.i5a.1158>
8. Madaoui N (2024) The impact of artificial intelligence on legal systems: challenges and opportunities. *Probl Leg* 1(164):285–303. <https://doi.org/10.21564/2414-990x.164.289266>
9. Artificial intelligence and language. *Edumania-An Int Multidiscip J* 02(04):113–123 (2024). <https://doi.org/10.59231/edumania/9077>
10. Chatterjee S (2023) Evaluating the effects of AI-powered training programs on skill development and career growth. *Int J Adv Res Sci Commun Technol* 941–945. <https://doi.org/10.48175/ijarsct-12743d>
11. Dash A, Mohanty S (2023) The mediating effect of a firm's corporate reputation and sustainability practices in translating CSR into competitive performance in Indian ESG companies. *Soc Bus Rev* 18(4):691–709. <https://doi.org/10.1108/sbr-02-2023-0045>
12. Kowalski J (2016) Ordering dependence: care, disorder, and kinship ideology in north Indian antiviolence counseling. *Am Ethnol* 43(1):63–75. <https://doi.org/10.1111/amet.12263>
13. Pradhan R, Dash S, Jena L (2017) Do hr practices influence job satisfaction? examining the mediating role of employee engagement in Indian public sector undertakings. *Glob Bus Rev* 20(1):119–132. <https://doi.org/10.1177/0972150917713895>
14. Sarkar S (2019) How independent is India's labour law framework from the state's changing economic policies? *Econ Labour RelatS Rev* 30(3):422–440. <https://doi.org/10.1177/1035304619863550>
15. Singh V (2023) Judicial activism as an essential tool for the protection and expansion of human rights in India. *Kutafin Law Rev* 10(1):88–109. <https://doi.org/10.17803/2713-0533.2023.1.23.088-109>
16. Navigating peace: harnessing artificial intelligence for conflict resolution. *Int Res J Mod Eng Technol Sci* (2024). <https://doi.org/10.56726/irjmets49337>
17. Alhosani K (2024) Opportunities, challenges, and benefits of AI innovation in government services: a review. *Discov Artif Intell* 4(1). <https://doi.org/10.1007/s44163-024-00111-w>
18. Benítez J, Gómez-Reino M, Suárez A (2020) Data-driven democracy? automated decision-making, difference and preferences. <https://doi.org/10.33774/apsa-2020-rx8fs>
19. Brittain M (2020) A deep multi-agent reinforcement learning approach to autonomous separation assurance. <https://doi.org/10.48550/arxiv.2003.08353>
20. Morley J, Floridi L, Kinsey L, Elhalal A (2019) From what to how: an initial review of publicly available AI ethics tools, methods and research to translate principles into practices. *Sci Eng Ethics* 26(4):2141–2168. <https://doi.org/10.1007/s11948-019-00165-5>
21. Tran P, Pham D, Goh S, Alam S, Duong V (2020) An interactive conflict solver for learning air traffic conflict resolutions. *J Aerosp Inf Syst* 17(6):271–277. <https://doi.org/10.2514/1.i010807>