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Editors

Proceedings of International Conference on Artificial Intelligence for Sustainable Development

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Editors

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Preface

We hereby are delighted to announce that Jaypee University Anoopshahar, UP, India in association with SAGE University, Indore, India, has hosted the eagerly awaited and much coveted “International Conference on Artificial Intelligence for Sustainable Development” (ICAISD-2025) in Hybrid Mode. The conference was able to attract a diverse range of engineering practitioners, academicians, scholars and industry delegates, with the reception of abstracts including more than 150 authors from different parts of the world. The committee of professionals dedicated towards the symposium is striving to achieve a high-quality technical program with track on Computing, Artificial Intelligence for Sustainable Development. Therefore, a lot of research is happening in the above-mentioned track and its related sub-areas. More than 100 full-length papers have been received, among which the contributions are focused on theoretical, computer simulation-based research, and laboratory-scale experiments. Amongst these manuscripts, 25 papers have been included in the Adroid Conference proceedings after a thorough two-stage review and editing process.

All the manuscripts submitted to the ICAISD-2025 were peer-reviewed by at least two independent reviewers, who were provided with a detailed review proforma. The comments from the reviewers were communicated to the authors, who incorporated the suggestions in their revised manuscripts. The recommendations from two reviewers were taken into consideration while selecting a manuscript for inclusion in the proceedings. The exhaustiveness of the review process is evident, given the large number of articles received addressing a wide range of research areas. The stringent review process ensured that each published manuscript met the rigorous academic and scientific standards. It is an exalting experience to finally see these elite contributions materialize into a book volume as ICAISD-2025 Adroid Conference proceedings entitled “International Conference on Artificial Intelligence for Sustainable Development” (ICAISD-2025).

All the contributing authors owe thanks from the organizers of ICAISD-2025 for their interest and exceptional articles. We would also like to thank the authors of the papers for adhering to the time schedule and for incorporating the review comments. We wish to extend my heartfelt acknowledgment to the authors, peer-reviewers, committee members and production staff whose diligent work put shape to the ICAISD-2025 proceedings. We especially want to thank our dedicated team of peer-reviewers who volunteered for the arduous and tedious step of quality checking and critique on the submitted manuscripts. The management, faculties, administrative and support staff of the college has always been extending their services whenever needed, for which we remain thankful to them.

Lastly, we would like to thank Adroid Conference proceedings for accepting our proposal for publishing the ICAISD-2025 conference proceedings.

Dr. Nishant Shrivastava, Dr. Jitendra Saxena, Dr. Aditya Khamparia,

Dr. Mahmood Afzal Hussain, Dr. Anand Kadukuntla

Editors, ICAISD-2025

About the Editors

Dr. Nishant Shrivastava is an accomplished academician and researcher with over two decades of experience in Computer Science and Engineering. He serves as Associate Professor and Dean at Jaypee University, Anoopshahr. He obtained his Ph.D. in 2014 on “An Effective Content-Based Image Retrieval System.” His research interests include Image Processing, Computer Vision, Pattern Recognition, and Machine Learning, and he has guided numerous UG/PG projects and Ph.D. scholars.

Prof. (Dr.) Jitendra Saxena, FIE, is a distinguished academician, administrator, and researcher with over 28 years of excellence in teaching, research, and institutional leadership. A Ph.D. in Information Technology from NIT Bhopal, he has spearheaded digital reforms, built collaborations with IITs, NITs, and TCS, and published widely. Currently Professor at SAGE University, Indore, he is committed to strengthening IET's progressive growth, enhancing membership, and mentoring young engineers.

Dr. Aditya Khamparia has over ten years of experience in teaching, entrepreneurship, and R&D. He is an Assistant Professor and Coordinator of Computer Science at Babasaheb Bhimrao Ambedkar University, Satellite Centre, Amethi India. He earned his PhD from Lovely Professional University, MTech from VIT University, and PDF from UNIFOR, Brazil. With 100+ research papers, 20+ SCI articles, and 10 books, he is listed among the top 2% scientists globally and ranked 1 in India in healthcare research. His interests include machine learning, deep learning, educational technologies, and computer vision.

Dr. Mahmood Afzal Hussain is a cybersecurity engineer and researcher specializing in AI-driven risk management and software product security. He holds a PhD with a focus on AI-human collaboration in cybersecurity decision-making and has over 14 years of experience in enterprise security, governance, and applied AI. Dr. Hussain has served as a peer reviewer for IEEE-indexed and Elsevier journals, a session chair for international conferences, and a judge for global hackathons. His work bridges academic research and real-world security engineering, with contributions spanning AI security, cloud defense, and organizational risk intelligence.

Dr. Anand Kadukuntla is an Executive Director at Wells Fargo, leading enterprise initiatives in Predictive Intelligence, Agentic AI, and AI automation. He focuses on designing and deploying advanced AI capabilities that enhance decision making, modernize service operations, and improve customer and employee experiences. He holds a Ph.D. in Information Technology with research in ethical and human-centered AI, algorithmic fairness, and responsible predictive systems. His work integrates enterprise product management with transparent, adaptive, and secure AI ecosystems.