

# Proceedings of the 2024 Sixth Doctoral Symposium on Intelligence Enabled Research (DoSIER 2024)

Hosted by Sukanta Mahavidyalaya, Dhupguri, Jalpaiguri, India in association with Algebra University, Zagreb, Croatia, 28-29 November 2024

## Preface

We are honored to present the proceedings of the 2024 Sixth Doctoral Symposium on Intelligence Enabled Research (DoSIER 2024), hosted by Sukanta Mahavidyalaya under the University of North Bengal in hybrid mode. This hybrid symposium united researchers, academicians, industry experts, and scholars globally, reflecting the growing prominence of intelligence-enabled research in computing and intelligent systems. The symposium was technically sponsored by the Asia-Pacific Artificial Intelligence Association (AAIA), Kolkata Branch, and the IEEE Computational Intelligence Society, Kolkata Chapter.

DoSIER 2024 is one of its kind to offer participants insightful feedback on their ongoing research and guide them toward future research avenues, and foster a nurturing community of scholars, and encourage collaborative research endeavors, facilitate interactions between student participants, seasoned researchers, and practitioners within relevant research domains, and create a platform for a closed research forum, enabling the exchange of knowledge and expertise among participants.

DoSIER 2024 attracted around 65 submissions, of which 20 exceptional contributions were selected for presentation and inclusion into the CEUR workshop proceedings, showcasing innovative methodologies and applications across diverse fields. A rigorous two-stage review process ensured academic excellence, with each manuscript evaluated by at least three independent experts.

DoSIER 2024 featured 05 keynotes apart from the technical paper presentations. The keynote speakers included (i) Prof. (Dr.) Tingwen Huang, IEEE Fellow, Shenzhen University of Advanced Technology, China, (ii) Prof. (Dr.) Rizk M. Rizk-Allah, Faculty of Engineering, Menoufia University, Shebin El Kom, Egypt, (iii) Prof. (Dr.) Paramartha Dutta, Visva-Bharati University, West Bengal, India, (iv) Dr. Jagdish Chand Bansal, South Asian University, New Delhi, India, and (v) Dr. Rakesh Kumar Mandal, University of North Bengal, India.

The proceedings celebrate the synergy between academic innovation and real-world applications. We thank the authors, reviewers, committee members, and supporting staff for their dedication. Special thanks are due to the CEUR workshop proceedings for collaborating to publish this valuable volume. The editors hope that this collection will inspire further exploration in intelligence-enabled research.

Date: 15th January, 2025  
Ostrava, Czech Republic  
Jalpaiguri, India  
Kolkata, India  
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*The 2024 Sixth Doctoral Symposium on Intelligence Enabled Research (DoSIER 2024), November 28–29, 2024, Jalpaiguri, India*



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