Gist of ICISDA-2026

The International Conference on Information Systems Design and Intelligent Applications (ICISDA-2026) was successfully organized on 24–25 August 2026 as an interdisciplinary platform bringing together researchers, academicians, scientists, technologists and scholars working at the intersection of Artificial Intelligence, Information Systems, Bioinformatics, Biotechnology, Genomics, Traditional Knowledge Systems, Healthcare, Agriculture, Quantum Technologies and Sustainable Technologies. The conference was organized by Sarvasumana Association, Bengaluru, in collaboration with the Department of Computer & Information Technology, Hemchandracharya North Gujarat University, Patan; ACS College of Engineering, Bengaluru; and Cebu Institute of Technology–University, Philippines.

The conference emphasized the integration of emerging intelligent technologies with traditional and scientific knowledge systems. The programme featured keynote and plenary lectures on 5G/6G-enabled digital preservation of Traditional Knowledge Systems, systems pharmacology and Ayurveda, AI-enabled pharmacogenomics and precision medicine, intelligent information systems for microbiology and One Health, and carbon quantum dots for green and sustainable technologies. These themes demonstrated the conference's central objective of connecting modern computational approaches with biological, healthcare, environmental and traditional knowledge domains.

The technical presentations covered a particularly broad spectrum. Research contributions included AI-powered productivity systems, adaptive intelligent user interfaces, blockchain and AI in banking, explainable AI, deep learning for diabetic retinopathy and skin-lesion classification, smart agriculture, molecular docking, phylogenetic analysis, carbon quantum dots, recommendation systems, cybersecurity and cryptanalysis. The conference also had strong representation from bioinformatics and computational biology, including SNP discovery in dragon fruit, genomic characterization of antimicrobial resistance, phytochemical analysis, molecular docking and computational approaches to plant biotechnology.

A notable contribution was the study on identification of SNPs associated with fruit sweetness in dragon fruit (Hylocereus spp.), presented by Vedaanshi Verma and Preenon Bagchi, Jaipur National University. The study used NGS datasets and a bioinformatics workflow involving sequence-quality assessment, reference-genome alignment, variant calling and functional

annotation to identify candidate genetic variants potentially associated with fruit sweetness and quality traits.

The conference successfully demonstrated the value of interdisciplinary research, particularly the convergence of AI, computational biology, genomics, traditional knowledge and sustainable technologies. The two-day programme concluded with the Valedictory Session, conference gist and vote of thanks, followed by announcement of winners, as recorded in the official conference schedule.

Winner List – Physical Presentation

Position	Winner(s)	Institution	Presentation
1	Dr. Jayeshkumar Natwarlal Modi	Department of Computer & IT, HNGU, Patan	*A Design of an AI-Powered Productivity Intelligence System for Personalized Work Optimization*
2	Dr. Hinal Prajapati & Dr. Nehaben Thakkar	Department of Computer & IT, HNGU, Patan	*An AI-Driven Adaptive User Experience Framework for Intelligent Meditation Information Systems Integrating Indian Knowledge Systems*
2	Vedaanshi Verma	Jaipur National University, Rajasthan	*Identification of Single Nucleotide Polymorphisms (SNPs) Associated with Fruit Sweetness in Dragon Fruit (Hylocereus spp.)*

The physical presentations included research in AI, intelligent information systems, Indian Knowledge Systems and genomics, reflecting the interdisciplinary character of ICISDA-2026. The official schedule confirms the physical presentation status of the relevant papers.

Winner List – Virtual Presentation

Position	Winner	Institution	Presentation
1	Sana Shaikh	Pimpri Chinchwad University, Pune	*Autonomous Multi-Model Vision System for Site-Specific Weed Detection and Selective Spraying in Smart Agriculture*
2	Shravani	PIMS	*Comparative In Silico Analysis of Anthocyanin Biosynthetic Enzymes Reveals Evolutionary Conservation and Functional Diversity Among*

			Oryza Species
2	Aishwarya	PIMS	*Computational Evaluation of the Anti-Obesity Potential of Phytochemicals Isolated from Millets Using Molecular Docking*
3	Surekha Vitthalrao Dhumal	Pimpri Chinchwad University, Pune	*Towards Generalizable Diabetic Retinopathy Grading: A Multi-Dataset Cross-Validation Study Using Hybrid Deep Learning Across APTOS, IDRiD, Messidor, and EyePACS*

These virtual presentations represented major application areas including smart agriculture, plant computational biology, molecular docking and healthcare-oriented deep learning. The conference schedule lists these contributions among the virtual presentations. Conference

Overall, ICISDA-2026 provided a meaningful forum for translating interdisciplinary research into intelligent, sustainable and socially relevant applications, while strengthening collaboration between modern computational science and traditional knowledge systems.