



DEPARTMENT OF COMPUTER SCIENCE [PG]

IN COLLABORATION WITH

UNIVERSITY OF MICHIGAN-FLINT

ORGANISES

INTERNATIONAL CONFERENCE ON CURRENT TRENDS IN ADVANCED COMPUTING - ICCTAC 2025

ON

HIGH PERFORMANCE COMPUTING APPLICATIONS: TRANSFORMING SCIENCE, ENGINEERING, AND INDUSTRY

14th & 15th MAY, 2025



SCAN TO REGISTER

SPRINGER NATURE

KRISTU JAYANTI Journal of Computational Scienc<u>e</u>s



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KRISTU JAYANTI COLLEGE, AUTONOMOUS

Kristu Jayanti College, founded in 1999, is managed by "BODHI NIKETAN TRUST", formed by the members of St. Joseph Province of the Carmelites of Mary Immaculate (CMI). The institution strives to fulfil its mission to provide educational opportunities for all aspiring young people to excel in life by developing academic excellence, fostering values, creating civic responsibility, inculcating environmental concern and building global competencies in a dynamic environment.

The College is affiliated to Bengaluru North University and is reaccredited with grade 'A++' in 2021 by NAAC in the Third Cycle of Accreditation. The college is recognized by UGC under the category 2(f) & 12(B). The College has been accorded Autonomous Status since 2013 by the University Grants Commission, the Government of Karnataka & Bangalore University.

In the NIRF 2024, Our college has been ranked 60th place in the top 100 colleges in the country. The programmes of School of Management are internationally accredited by the Accreditation Council for Business Schools and Programs [ACBSP, USA]. The college was accorded 'DBT Star College status under the strengthening component' by the Department of Biotechnology, the Ministry of Science & Technology and the Government of India. The institution received first prize at the National Level for 'Clean and Smart Campus Award' from Shri. Dharmendra Pradhan, Minister of Education, Govt. of India.

In the India Today - MDRA survey 2024, Kristu Jayanti College, Bengaluru is consecutively ranked as the Best Emerging College of the Century at National Level for Commerce, Science, Arts and Social Work. At the National level, the survey ranked the college as 4th Best in BCA, 12th Best in MSW, 20th Best in BBA, 21st Best in Commerce and Arts, 26th Best in Mass Communication, 28th Best in Science Programmes. The College is ranked as 2nd Best in MSW, 3rd Best in BCA and Commerce, 4th Best in Arts and Science, 5th Best in Mass Communication and 6th Best in BBA programmes among the colleges in Bengaluru.

DEPARTMENT OF COMPUTER SCIENCE (PG)

The Department of Computer Science (PG) at Kristu Jayanti College offers advanced degrees in MCA, M.Sc. (Computer Science), and M.Sc. (Data Science). Ranked among India's Top 10 Promising MCA Colleges, it focuses on imparting strong technical skills, problem-solving abilities, and ethical values. We actively seek collaboration with institutions like Michigan University to foster knowledge exchange and drive innovation in Computer Science and Engineering.

ICCTAC

The unified efforts towards the faculty development and growth, encourages us to embrace constant changes in technology. Owing to the rapid changes in the field of Computer technology, it is necessary to conduct conferences to bridge the gap between the current and emerging technology. In this regard the department has successfully organized three editions of National Conference(Current Trends in Advanced Computing) and six editions of International Conference.

The first two editions of the conference proceedings were published in International Journal of Computer Application (IJCA). For the years 2016 – 2018, the department had conducted International Conference in association with IEEE Bangalore section and was technically co-sponsored by IEEE Bangalore chapter and proceedings have been included in IEEE Xplore. ICCTAC'19 papers were published in Journal of Advanced Research in Dynamical and Control Systems (JARDCS) ISSN: 1943-023X (Scopus Indexed) Journal and BJIT - International Journal of Information Technology ISSN: 2511-2112(UGC Indexed). ICCTAC'20 papers were published in Journal of Green Engineering (Scopus Indexed) and BJIT - International Journal of Information Technology ISSN: 2511-2112(UGC Indexed). ICCTAC'21 articles were published in BJIT - International Journal of Information Technology ISSN: 2511-2112(Springer Journal-UGC Indexed). The 12th edition of International Conference during May 08th & 09th, 2024 was organized and all the presented papers were included in IEEEXPLORE digital library.

This year the department is planning to organize the 13th edition of International Conference during May 14th & 15th, 2025. The Conference would provide an international forum for presentations and discussions on emerging technologies in the field of Computer Science and Information Technology.

CONFERENCE THEME

HIGH PERFORMANCE COMPUTING APPLICATIONS: TRANSFORMING SCIENCE, ENGINEERING, AND INDUSTRY

High-Performance Computing (HPC) is transforming science, engineering, and industry by enabling complex simulations and data analyses. This conference explores HPC's impact across fields like scientific research, engineering, AI, and healthcare. From enhancing innovation in design and testing to breakthroughs in drug discovery and personalized medicine, HPC drives advancements that were once unimaginable. Experts will discuss future challenges, including energy efficiency, scalable algorithms, and emerging technologies like quantum computing, fostering collaboration and innovation in the field.

PAPER PRESENTATION AND PUBLICATION GUIDELINES

All registered and submitted papers will undergo a review process. Eligible papers, based on the evaluation, will be selected for presentation at ICCTAC 2025. Papers presented during the conference will be considered for publication opportunities as outlined below.

- Springer Book Series All papers registered and presented at ICCTAC 2025 will undergo a meticulous double-blind peer-review process. Following acceptance, these papers will be published in the ICCTAC 2025 conference proceedings, which are indexed by SCOPUS and accessible via SpringerLink. Please note that additional publication charges apply.
- 2. KJCS (with ISSN and DOI Number)- Registered and presented papers will undergo a peerreview process, and selected papers will be considered for publication in the Kristu Jayanti Journal of Computational Sciences (KJCS). KJCS is an annual, peer-reviewed international journal that publishes high-quality original research, theoretical and practical advances, and comprehensive survey articles in all areas of computing science and mathematics. It also includes interdisciplinary studies with interfaces to electronics, physics, statistics, and engineering. KJCS is indexed in Google Scholar, J-Gate, EuroPub, and Crossref, published by Kristu Jayanti College (Autonomous). Please note, there are no publication charges applicable for publishing in KJCS.

PAPER SUBMISSION GUIDELINES

- The paper should be based on original research work which is not yet published and not exceeding 4500 words or 12 pages.
- The fact must be declared if the paper has been sent for publication elsewhere.
- The first page should include the title, name of the author(s), affiliation, mailing address, and e-mail address.
- Paper should be submitted in Springer Format and the Template is available for download on the ICCTAC 2025 website.
- Registration for Participation/Presentation of paper should be confirmed on or before 28th February 2025.
- Submit the completed registration form by paying the Registration Fee via the registration Link::https://portal.kristujayanti.edu.in/event-international-conference-
- <u>on-current-trends-in-advanced-computing-icctac-2025</u>
- Research papers submitted after 28/02/2025 will not be considered for publication.
- Certificate of Participation will be awarded only to those participants who register andattend all the sessions of the conference.

REGISTRATION FEE

Participant Profile	Academicians & Industry	Full Time Ph.D Research Scholars	Foreign Delegates
Participation with paper presentation	1500	1200	\$50
Participation only	1000	700	Free

TRACKS

All the authors are encouraged to contribute their original and unpublished work in the areas related to, but not restricted to, the conference themes as follows:

Track 1: Artificial Intelligence

- Applied Machine Learning
- Natural Language Processing
- Al Applications in Social Science
- Chat Bots using AI
- Deep Learning
- Neural Networks

Track 2: Internet of Things (IoT)

- Smart Device Integration and Automation
- IoT Security Challenges
- IoT Privacy Challenges
- IoT in Smart Cities
- IoT in Infrastructure
- Sensor Networks and Edge Computing

Track 3: High-Performance Computing

- Parallel and Distributed Computing Techniques
- Scalable Algorithms for Big Data
- GPU and Quantum Computing Applications
- Energy-Efficient Computing Models

Track 4: Cloud Computing

- Cloud Storage and Data Management
- Cloud Security and Disaster Recovery
- Serverless Computing Paradigms
- Multi-Cloud and Hybrid Cloud Solutions

Track 5: Blockchain

- Blockchain for Cybersecurity and Privacy
- Decentralized Applications (DApps)
- Smart Contracts and Their Use Cases
- Blockchain in Financial and Supply Chain Systems

IMPORTANT DATES		
Paper Submission & Registration Deadline	28th February 2025	
Author Notification	8th April 2025	
Camera-Ready Paper Submission	12th April 2025	
Conference Dates	14th & 15th May 2025	

CONTACT DETAILS FOR FURTHER COMMUNICATION

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