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PVKK Institute of Technology

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Sanapa Road, Alamuru (P), Rudrampeta,
Anantapuramu - 515 001, Andhra Pradesh, India.



International Conference on Computational Algorithms and Communication Techniques in Engineering Applications (ICCAT 2026)

The International Conference on Computational Algorithms and Communication Techniques in Engineering Applications (ICCAT 2026) is a prestigious global forum that brings together researchers, academicians, engineers, industry professionals, and technologists to deliberate on the latest developments and innovations in the realm of intelligent computing and communication systems. Hosted with the vision of promoting excellence in research and fostering interdisciplinary collaboration, this conference emphasizes the critical integration of computational algorithms with communication technologies to address real-world engineering problems. As engineering disciplines continue to evolve in the face of digital transformation, there is an urgent demand for high-performance, scalable, and intelligent solutions across diverse sectors from smart cities and autonomous systems to biomedical devices and cloud-based infrastructures. ICCAT 2026 aims to address these demands by focusing on next-generation computational methods, optimization techniques, and robust communication protocols that support intelligent, secure, and efficient engineering systems.

THEME : FUTURE TECH SYNERGY: AI, COMPUTING, AND COMMUNICATION FOR INDUSTRY 4.0 AND BEYOND.

Technical Tracks

- Track 1: Computational Intelligence and Algorithms
- Track 2: Signal and Image Processing
- Track 3: Biomedical Signal/Image Analysis
- Track 4: 5G/6G Communication Protocols and Architecture
- Track 5: IoT and Cyber-Physical Systems (CPS)
- Track 6: SoC and FPGA-based Designs
- Track 7: Embedded Systems
- Track 8: Power and Energy Systems
- Track 9: Mechanical Engineering Frontiers in Intelligence and Sustainability
- Track 10: AI in Healthcare, Agriculture, and Industry 4.0



Dr. Palle Venkata Krishna Kishore Reddy,
Chairman, S.B.E.S



Dr. Palle Raghunath Reddy,
Correspondent and Secretary,
S.B.E.S



Mrs. Palle Sindhura Reddy,
Director, S.B.E.S



Conference Dates
15 - 16 May 2026

Dr. G. Sreenivasan | Mr. R. Suresh
E-Mail: iccat2026@pvkkit.ac.in



Contact No
+91 8519 8484 84

Website Link : iccat2026.pvkkit.ac.in

International Keynote Speakers



Satyaranjan Bairagi, Ph.D
ETH Zurich, Postdoctoral Researcher



Dr. Anuj Kumar Goel
Focus College BC · mos Abbotsford,
British Columbia, Canada.



Dr Bhavani Prasad Yalagala
Research Manager
University of Glasgow, U.K.

National Keynote Speaker



Dr Argha Sarkar
M.Tech & Ph.D. – NIT Arunachal Pradesh,
Visvesvaraya Fellow
(MeitY, Govt. of India.)
REVA University, India.



Dr Mohankumar N
Professor- Research.
Symbiosis Institute of Technology,
Nagpur, India.



Prof. U S N Raju, Ph.D
Associate Professor,
Dept of CSE,
NIT, Warangal.

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Chairman, S.B.E.S
- Mrs. Palle Sindhura Reddy, Director,
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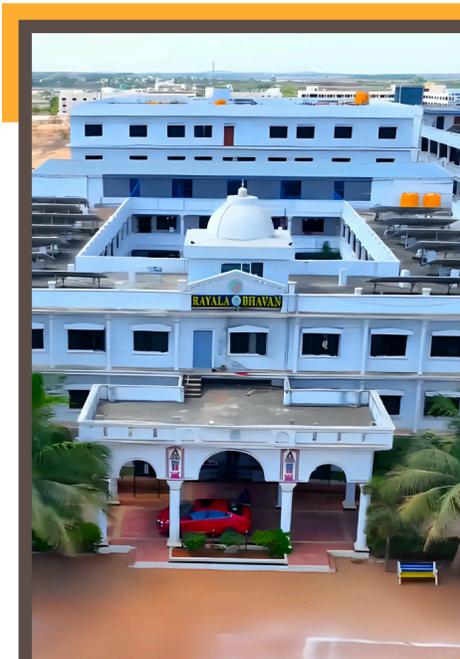
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Conference Tracks

Track 1: Computational Intelligence and Algorithms

Focus: Advanced algorithmic approaches and theoretical computation

- Evolutionary algorithms (e.g., GA, PSO, ACO)
- ML, DL, RL methodologies
- Discrete mathematics: graph theory, combinatorics
- Quantum algorithms / quantum-inspired methods

Track 2: Signal and Image Processing

Focus: Processing and recognition of visual/auditory data

- DSP and real-time processing
- Computer vision, pattern recognition
- Video/image analytics

Track 3: Biomedical Signal/Image Analysis

Focus: Healthcare-oriented signal processing

- Audio/speech enhancement
- Biomedical imaging and diagnostics
- Communication systems relevant to medical tech

Track 4: 5G/6G Communication Protocols and Architecture

Focus: Advanced algorithmic approaches and theoretical computation

- Evolutionary algorithms (e.g., GA, PSO, ACO)
- ML, DL, RL methodologies
- Discrete mathematics: graph theory, combinatorics
- Quantum algorithms / quantum-inspired methods

Track 5: IoT and Cyber-Physical Systems (CPS)

Focus: Connected devices and real-time control

- Sensor/edge/fog networks
- Real-time CPS communication
- Security/privacy in IoT
- Embedded systems and VLSI

Track 6: SoC and FPGA-based Designs

Focus: Hardware design and emerging materials

- Low-power, high-performance designs
- Hardware-software integration
- MEMS, nanoelectronics

Track 7: Embedded Systems

Focus: Embedded solutions for smart manufacturing

- Industry 4.0
- IOT
- Smart Systems and Automation
- Robotics

Track 8: Power and Energy Systems

Focus: Renewable Energy Integration and Smart Grids

- Smart Grids
- Renewable Energy
- Power Electronics
- High Voltage Engineering
- Electric Machines and Drives

Track 9: Mechanical Engineering Frontiers in Intelligence and Sustainability

Focus: Intelligent and sustainable innovations in mechanical engineering

- DL for real-time thermal management
- ML in additive manufacturing
- AI-driven life cycle assessment (LCA)
- Intelligent sustainable materials & design
- Self-learning algorithms for leak detection & fault diagnosis
- AI-integrated human-robot collaboration (HRC)

Track 10: AI in Healthcare, Agriculture, and Industry 4.0

Focus: Interdisciplinary and emerging AI use-cases

- Smart infrastructure (transport, grids, robotics)
- AI-based control systems
- Explainable AI, ethical AI
- Neuromorphic/bio-inspired computing
- Digital twins, metaverse
- Green/sustainable technologies
- Quantum/post-quantum cryptography



About the Host Institute

PVKK Institute of Technology (PVKKIT), located in Anantapuramu, Andhra Pradesh, has emerged as a prominent center for higher education in the Rayalaseema region since its establishment in 2008. As a self-financing institution dedicated to Engineering and Technology, PVKKIT is approved by the All India Council for Technical Education (AICTE), New Delhi, and is recognized by the University Grants Commission (UGC) under Section 2(f). It is affiliated with the prestigious Jawaharlal Nehru Technological University Anantapur (JNTUA), Anantapuramu. The institute serves as the flagship among a network of over 38 educational institutions managed by the Sri Balaji Educational Society (SBES), Anantapuramu. Spread over a well-planned 10-acre campus, PVKKIT offers a broad spectrum of academic programs, including 8 undergraduate and 7 postgraduate courses in the fields of Engineering, Technology, Management (MBA), and Computer Applications (MCA). With an enrollment of around 1,980 students, the institution is committed to nurturing talent through quality education and holistic development. PVKKIT's dedication to maintaining high academic standards is evidenced by its recent accolades: three of its core engineering departments—Computer Science and Engineering (CSE), Electrical and Electronics Engineering (EEE), and Mechanical Engineering (ME) have been accredited by

the National Board of Accreditation (NBA) for the period 2023–2026. Furthermore, the institution has been awarded an 'A' grade by the National Assessment and Accreditation Council (NAAC) for the cycle 2024–2029. Adding to its credentials, PVKKIT has also been granted Autonomous Status for a period of 10 years, empowering it to design its own curriculum, implement innovative teaching methodologies, and conduct examinations independently. These prestigious recognitions mark significant milestones in the institution's journey and serve as a strong foundation as it aspires to attain the status of a Deemed-to-be University in the near future. Through a blend of academic rigor, institutional autonomy, and visionary leadership, PVKKIT continues to play a vital role in shaping the future of engineering and technological education in the region.



Submission guidelines

The complete manuscript must be submitted through the Microsoft Conference Management Tool Kit (CMT) platform. All authors must acknowledge that they are familiar with and agree to follow the Publication Ethics and Malpractice Statement as well as the Privacy Policy associated with the event. Submitted papers should clearly demonstrate appropriate scope, originality, and validity. The data presented in the paper must be accurately reported, properly analyzed, and correctly interpreted. In addition, the manuscript should maintain clarity, follow all required guidelines, and provide a meaningful contribution to the field of study.

Note: Authors must also ensure that their papers strictly follow the specified formatting requirements, and the total length of the manuscript should not exceed five (5) pages. The final paper must maintain a plagiarism level below 10% when evaluated using Turnitin or similar AI-based plagiarism detection software.

Review Process & Indexing

All accepted and presented papers will be submitted for inclusion in the Conference Proceedings, subject to meeting scope and quality requirements. Articles will be submitted to Scopus indexing platforms and are subject to quality parameters and indexing guidelines.

Information to Authors

Conference Website: iccat2026.pvkkit.ac.in

Paper Format: <https://rb.gy/lygt9i>

CMT Link (Paper submission):

<https://cmt3.research.microsoft.com/ICCAT2026>

Registration Link : <https://forms.gle/ruhA4wmy1tbqmXk8>

Important Dates

Submission Deadline : 30 March 2026

Acceptance Notification : 10 April 2026

Registration Deadline : 20 April 2026

Conference Dates : 15 - 16 May 2026.

Venue

PVKK Institute of Technology,
Sanapa Road, Alamuru (P),
Rudrampeta, Anantapuram - 515 001,
Andhra Pradesh, India.



Registration Charges

Type of Registration	Indian Authors (Extra (+) 18% GST)	Foreign Authors
Industry Participants	16,500/-	USD 400
Academicians / Research Scholars	15,500/-	USD 350
U G & PG Students	14,500/-	USD 300

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