



2027 IEEE 12th International Conference on
Cloud Computing and Big Data Analytics

23-25 April 2027 | Chengdu, China

Special
Session **2**

Advances in Cryptographic Primitives and Privacy Preserving Computing

Cryptography serves as the fundamental cornerstone for modern-day privacy protection. This special session targets recent advances in core cryptographic primitives and practical privacy-preserving computing technologies. We welcome high-quality submissions covering symmetric/asymmetric encryption schemes, zero-knowledge proofs, secure multi-party computation, homomorphic encryption, differential privacy, and their optimized implementations. Papers focusing on algorithm improvement, performance optimization, security proof analysis, and prototype development are highly encouraged. This session emphasizes foundational cryptographic research rather than cloud-specific security applications, aiming to bring together researchers working on underlying encryption and privacy-enhancing building blocks. Original research and comprehensive survey papers are both acceptable.

Topics

- Cryptographic Primitive Design and Optimization
- Symmetric and Asymmetric Encryption Scheme Innovation
- Zero-Knowledge Proofs and Privacy Authentication Protocols
- Secure Multi-Party Computation Theory and Applications
- Fully/Partially Homomorphic Encryption Optimization
- Differential Privacy Theory and Privacy Enhancement Mechanism
- Provable Security Analysis of Encryption and Privacy Protocols
- Lightweight Privacy-Preserving Cryptographic Algorithms

Publication

Submitted papers will be peer reviewed by conference committees, and accepted papers will be included in ICCCBDA 2027 Conference Proceedings.

Submission Link and Templates

Submission Link: <https://easychair.org/conferences/?conf=icccbda2027> ((Please select Track 1))

Submission Templates:

<https://icccbda.com/instruct8.5x11x2.doc> (Word Version)

<https://icccbda.com/ieee-latex-conference-template.zip> (LaTeX Version)

Special Session Chair



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Important Dates

Submission deadline: December 5, 2026

Notification Date: January 5, 2027

Registration Deadline: January 20, 2027

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