

🌐 China 📅 May 9-12, 2025

CONFERENCE WEBSITE: <https://www.eda2.com/iseda/index.html>

| About the Conference

★Full Name: International Symposium of EDA 2025

★Abbreviation: ISEDA 2025

Date: May 9-12, 2025

Website: <https://www.eda2.com/iseda/index.html>

Venue: Hong Kong Disneyland, China

Sponsored by IEEE and ACM, and jointly organized by EDA² and the EDA Committee of CIE, the ISEDA (International Symposium of EDA) is an annual premier forum dedicated to VLSI design automation. The symposium aims at exploring the new challenges, presenting leading-edge technologies and providing EDA community with opportunities of predicting future directions in EDA research areas. ISEDA covers the full range of EDA topics from device and circuit levels up to system level, from analog to digital designs as well as manufacturing. The format of meeting intends to cultivate productive and novel interchangeable ideas among EDA researcher and developers. Academic and industrial EDA related professionals who are interested in EDA's theoretical and practical research are all welcomed to contribute to ISEDA.

Important Dates

MAY
09

CONFERENCE
DATE
**May 9-12,
2025**

★Advisors

IEEE/CEDA, ACM/SIGDA

Department of Information Science, National

Natural Science Foundation of China (NSFC)

Chinese Institute of Electronics (CIE)

Steering Committee, Major Plan of “Fundamental
Research on Post-Moore Novel Devices”

★Organizer

EDA Ecosystem Development Accelerator (EDA2)

EDA Committee of CIE

★Co-Organizers

The Chinese University of Hong Kong

Peking University

Southeast University

Tsinghua University

Xidian University

★Committees

【Executive Committee】

General Chairs :

Ru Huang, President of Southeast University,

Academician of the Chinese Academy of Sciences

Yue Hao, Professor of Xidian University,

Academician of the Chinese Academy of Sciences

【Steering Committee】

Shaojun Wei, Tsinghua University

Xuan Zeng, Fudan University

Patrick Girard, French National Center for Scientific
Research

Jamal Deen, McMaster University

Yankin Tanurhan, Synopsys

【Technical Program Committee】

Conference Chairs :

Tsung-Yi Ho, The Chinese University of Hong Kong

Runsheng Wang, Peking University

Gang Qu, University of Maryland

Technical Program Chairs :

Bei Yu, The Chinese University of Hong Kong

Yun Liang, Peking University

Ulf Schlichtmann, Technical University of Munich

Special Session Chair:

Wenjian Yu, Tsinghua University

Industrial Session Chair:

Fan Yang , Shenzhen GWX Technology Co.,Ltd.

Tutorial/Training Chair:

Zuochang Ye, Tsinghua University

Finance Chair:

Gang Chen, Nanjing Industrial Innovation Center of
EDA

Panel Chair:

Yibo Lin, Peking University

Publication Chair:

Qiang Xu, The Chinese University of Hong Kong

Industry Liaison:

Yutao Ma, Primarius Technologies Co.,Ltd

Publicity Chair:

Xin Li, Duke Kunshan University

Outreach Chairs:

[US] Hai Zhou, Northwestern University

[Canada] Peter Chun, University of Alberta

[Europe] Zebo Peng, Linköping University

[Asia] Xiaoqing Wen, Kyushu Institute of
Technology

★Track Committee

1. System-Level Modeling and Design Methodology

Chair: Jieru Zhao, Shanghai Jiao Tong University

Co-Chair: Qi Sun, Zhejiang University

2. Memory Architecture and Near/In Memory
Computing

Chair: Xiaoming Chen, Institute of Computing
Technology, CAS

Co-Chair: Li Du, Nanjing University

3. Analog-Mixed Signal Design Automation

Chair: Fan Yang, Fudan University

Co-Chair: Keren Zhu, Fudan University

4. High-Level, Behavioral, and Logic Synthesis and
Optimization

Chair: Zhufei Chu, Ningbo University

Co-Chair: Weikang Qian, Shanghai Jiao Tong
University

5. Analysis and Optimization for Power and Timing

Chair: Yibo Lin, Peking University

Co-Chair: Zhiyao Xie, HKUST

6. Physical Implementation

Chair: Hailong Yao, University of Science and
Technology Beijing

Co-Chair: Yuzhe Ma, HKUST (GZ)

7. Testing, Validation, Simulation, and Verification

Chair: Huawei Li, Institute of Computing
Technology, CAS

Co-Chair: Hongce Zhang, HKUST (GZ)

8. Design for Manufacturability and Reliability

Chair: Lan Chen, Institute of Microelectronics, CAS

Co-Chair: Yu-Guang Chen, National Central
University

9. Packaging & Multi-Physics Simulation

Chair: Hongliang Lu, Xidian University

Co-Chair: Yarui Peng, University of Arkansas

10. Technology & Modeling

Chair: Lining Zhang, Peking University

Co-Chair: Hao Yan, Southeast University

11. Emerging Technologies and Applications

Chair: Xiangshui Miao, HUST

Co-Chair: Hailong You, Xidian University

12. AI & Open Source EDA

Chair: Guojie Luo, Peking University

Co-Chair: Xingquan Li, Peng Cheng Laboratory

★Call for Papers

[1] System-Level Modeling and Design

Methodology:

1.1 HW/SW co-design, co-simulation and co-
verification

1.2 System-level design exploration, synthesis,
and optimization

1.3 System-level formal verification

1.4 System-level modeling, simulation and

validation

1.5 Networks-on-chip and NoC-based system design

1.6 Constructing hardware in scala embedded language

[2] Memory Architecture and Near/In Memory Computing:

2.1 Storage system and memory architecture

2.2 On-chip memory architectures and management: Scratchpads, compiler controlled memories, etc.

2.3 Memory/storage hierarchies and management for emerging memory technologies

2.4 Near-memory and in-memory computing

[3] Analog-Mixed Signal Design Automation:

3.1 Analog/mixed-signal/RF synthesis

3.2 Analog layout, verification, and simulation techniques

3.3 High-frequency electromagnetic simulation of circuit

3.4 Mixed-signal design consideration

[4] High-Level, Behavioral, and Logic Synthesis and Optimization:

4.1 Digital simulation / emulation

4.2 High-Level synthesis

4.3 Logic synthesis

4.4 Synthesis for approximate computing

[5] Analysis and Optimization for Power and Timing:

5.1 Deterministic/statistical timing analysis and optimization

5.2 Process technology modeling for timing

analysis

5.3 Power modeling, analysis and simulation

5.4 Low-power design and optimization at circuit and system levels

5.5 Thermal aware design and dynamic thermal management

5.6 Energy harvesting and battery management

[6] Physical Implementation:

6.1 Floorplanning, partitioning, placement and routing optimization

6.2 Interconnect planning and synthesis

6.3 Clock network synthesis

6.4 Physical design of 3D/2.5D IC and package (e.g., TSV, interposer, monolithic)

6.5 Post layout and post-silicon optimization

6.6 Layout verification

[7] Testing, Validation, Simulation, and Verification:

7.1 RTL and gate-leveling modeling, simulation, and verification

7.2 Circuit-level formal verification

7.3 ATPG, BIST and DFT

7.4 System test and 3D IC test, online test and fault tolerance

7.5 Memory test and repair

[8] Design for Manufacturability and Reliability:

8.1 Design-technology co-optimization (DTCO)

8.2 Standard and custom cell design and optimization

8.3 Reticle enhancement, lithography-related design

optimizations and design rule checking

8.4 Design for manufacturability, yield, defect tolerance, cost issues, and DFM impact

8.5 Device-, gate, and circuit-level techniques for reliability analysis and optimization (e.g., soft error, aging, etc.)

8.6 Post-Layout optimizations

[9] Packaging & Multi-Physics Simulation:

9.1 Extraction, TSV, and package modeling

9.2 Chiplet design and design tools

9.3 Chip level thermal simulation

9.4 Packaging stress analysis

9.5 Multi-physics simulation

9.6 Signal/power integrity, EM modeling and analysis

[10] Technology & Modeling:

10.1 Device compact modeling

10.2 Process design Kit

10.3 Semiconductor process & device simulation

10.4 Cell library design, characterization and verification

10.5 New transistor/device and process technology: spintronic, phase-change, single-electron, 2D materials, etc.

[11] Emerging Technologies and Applications:

11.1 Biomedical, biochip, nanotechnology, MEMS

11.2 Design automation for 3D ICs and heterogeneous integration

11.3 Design automation for quantum computing

11.4 Design automation for silicon photonics

11.5 Design automation for compound semiconductors verification

[12] AI & Open Source EDA:

12.1 Artificial Intelligence for EDA

12.2 Cloud / Parallel Computing for EDA

12.3 Open Source EDA

12.4 EDA database

12.5 EDA standardization

★Paper Submission

Authors are invited to submit original papers, which have not been published elsewhere and are not currently under consideration for another journal, conference or workshop. Research findings can be submitted as full papers. All paper submissions must be done electronically using the submission system.

Best Paper Award, Honorable Mention Paper Award will be selected after the presentations.

Invited Talks: Need an abstract within one page

Extended Abstract: 1-2 pages

Regular Paper: 4-6 pages

Note: Extended abstract will not be published. If you have the publication purpose, please submit full paper before the deadline.

【Paper Template】

Follow the standard double column template:

<https://www.ieee.org/conferences/publishing/templates.html>

【Submission Link】

<https://www.eda2.com/conferenceHome/submissionHome>

【Liaison】

IEEE/CEDA Representative: Tsung-Yi Ho

CIE Representative: Shouyi Yin

Website Chair: Huixin Tang

Secretary: Xiakai Wang

★Contact Us

Conference Secretary: Ms. Joyce Zhong

Phone: +86 186 2826 3876

Email: iseda@eda2.com

Yu Huang | huangyu61@hisilicon.com

 **TOPICS OF INTEREST**

3 topics

Research papers are invited in, but not limited to, the following areas:

Energy & Power Systems

Electrical & Electronics Engineering

Uncategorized