Welcome from the CICC Committee!

Welcome to the CICC 2024 conference! On behalf of the Steering Committee and the Technical Program Committee, we are honored and delighted to present the 44th annual IEEE Custom Integrated Circuits Conference (CICC) – a showcase for Integrated Circuits. The conference will be organized as a live event, on-site at the DoubleTree by Hilton Denver in Denver, Colorado. Our conference will be a vibrant forum for sharing state of the art techniques and results, learning from world-renowned experts in custom IC designs and adjacent fields, and networking in person with old and new colleagues.

CICC 2024 officially starts with 4 Educational Sessions on Sunday April 21st, followed by daily keynote presentations and technical lectures from Monday through Wednesday. Throughout the conference, 25 Technical Sessions, 4 Forum Sessions, and 4 Panel Sessions are strategically placed to highlight the latest trends and challenges. The Outstanding Paper awards and closing ceremony is scheduled at the end of the conference. Registration covers all the events including the Educational Sessions on Sunday. Top-rated papers will be invited to the special issues in the IEEE Journal of Solid-State Circuits and the IEEE Solid State Circuits Letters.

The four Educational Sessions provide background tutorial information on several topics of active research, including "Deep Learning and Compute-in-Memory Designs and Applications", "Introduction to Quantum Computing for Circuit Designers", "Optical and Wireline Communication Circuit Techniques" and "Nascent Sensing Devices and Interfaces". All presenters are well known for their contributions in their respective areas.

The Technical Sessions are the backbone of our conference. This year's Technical Sessions will showcase original innovative analog and digital circuit techniques covering a broad spectrum of technical topics, including: Analog Circuits, Data Converters, Design Foundations, Digital Circuits, Emerging Technologies, Power Management, Wireless Circuits, and Wireline Circuits. This year we are proud to offer a strong technical program with 126 lecture presentations, including 17 invited papers.

These Technical Sessions are complemented by Forums and Panels covering various popular areas related to integrated circuits and systems. We are pleased to offer 4 Forum Sessions, including "AI-based Chip/Chiplet Generation", "Cutting-edge Energy Harvesting Interface Circuits & Systems", "Wireless Transceivers Towards Next G" and "Circuits and Packaging Techniques for Next-gen Wireline Communications". In addition, we offer 4 Panel Sessions, including "Cognitive Connections: Exploring Brain-Computer-Interfaces through Systems and Experiments", "Will open source design be the future direction?", "Can Academia Effectively Participate in Heterogeneous Integration Research and How?" and "How can LLMs help hardware design and will it replace digital design roles in the years to come?".

Moreover, we will hold exciting social events that include the Welcome Reception on Monday evening, SSCS Young Professionals and Women in Circuits Mentoring Event on Tuesday afternoon followed by the Conference Reception. The conference will close strong on Wednesday with the Best Paper Poster Session, and the Closing Ceremony where this year's outstanding paper winners will be announced.

Finally, the CICC Chairs and Steering Committee would like to extend their sincere thanks to the authors and the Technical Program Committee members for their hard work in writing and reviewing the papers and oral presentations. Your tireless efforts are essential to the success of CICC 2024 and are greatly appreciated. Please kindly join us at the conference in Denver this year!

Nan Sun
Technical Program Committee Chair
2024 IEEE Custom Integrated Circuits Conference