



# **ISSCC 2025 Awards**

## **February 2025**



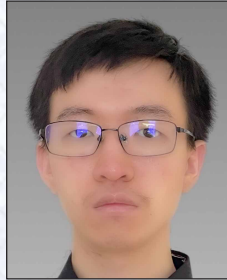




## ISSCC Awards

### 2024 Lewis Winner Award for Outstanding Paper

**“A 47GHz 4-way Doherty PA with 23.7dBm  $P_{1dB}$  and 21.7% / 13.1% PAE at 6 / 12dB Back-off Supporting 2000MHz 5G NR 64-QAM OFDM”**



Xiaohan Zhang



Hao Guo



Taiyun Chi

Rice University, Houston, TX

#### The Lewis Winner Award for Outstanding Paper

Lewis Winner served ISSCC for three decades (1958 to 1988) as Editor, Publisher, and Conference Coordinator. He was responsible, in considerable part, for establishing and maintaining the high standards of ISSCC publications and presentations. The Award in his honour is based on ratings by Conference attendees in the previous year.

### 2024 Anantha P. Chandrakasan Award for Distinguished-Technical-Paper

**“NVE: A 3nm 23.2TOPS/W 12b-Digital-CIM-Based Neural Engine for High-Resolution Visual-Quality Enhancement on Smart Devices”**



Ming-En Shih<sup>1</sup>



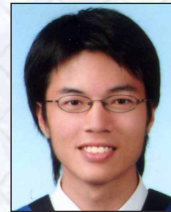
Shih-Wei Hsieh<sup>1</sup>



Ping-Yuan Tsai<sup>1</sup>



Ming-Hung Lin<sup>1</sup>



Pei-Kuei Tsung<sup>1</sup>



En-Jui Chang<sup>1</sup>



Jenwei Liang<sup>1</sup>



Shu-Hsin Chang<sup>1</sup>



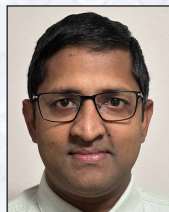
Chung-Lun Huang<sup>1</sup>



You-Yu Nian<sup>1</sup>



Zhe Wan<sup>2</sup>



Sushil Kumar<sup>2</sup>



Cheng-Xin Xue<sup>1</sup>



Gajanan Jedhe<sup>2</sup>



Hidehiro Fujiwara<sup>3</sup>



Haruki Mori<sup>3</sup>



Chih-Wei Chen<sup>1</sup>



Po-Hua Huang<sup>1</sup>



Chih-Feng Juan<sup>1</sup>



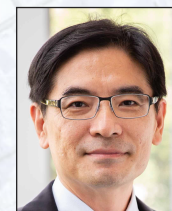
Chung-Yi Chen<sup>1</sup>



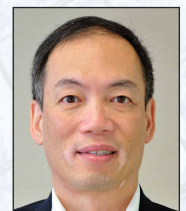
Tsung-Yao Lin<sup>1</sup>



CH Wang<sup>1</sup>



Chih-Cheng Chen<sup>1</sup>



Kevin Jou<sup>1</sup>

<sup>1</sup>MediaTek, Hsinchu, Taiwan, <sup>2</sup>MediaTek, San Jose, CA, <sup>3</sup>TSMC, Hsinchu, Taiwan

#### Anantha P. Chandrakasan Award for Distinguished-Technical Paper

This Award is based on ITPC ratings at paper selection, as normalized at paper presentation time by members of the Awards & Recognition Committee (ARC). In recognition of the many decades of contribution by Anantha Chandrakasan, and his retirement as Conference Chair, this Award was renamed in his honour in 2019.



## 2024 Anantha P. Chandrakasan Award for Distinguished-Technical-Paper

“A 224Gb/s sub pJ/b PAM-4 and PAM-6 DAC-Based Transmitter in 3nm FinFET”



Marco Cusmai<sup>1</sup>



Noam Familia<sup>1</sup>



Elad Kuperberg<sup>1</sup>



Mohammad Nashash<sup>1</sup>



Dovid Gottesman<sup>1</sup>



Daljeet Kumar<sup>2</sup>



Zvi Marcus<sup>1</sup>



Yeshayahu Horwitz<sup>1</sup>



Sagi Zalcman<sup>1</sup>



Jihwan Kim<sup>3</sup>



Sandipan Kundu<sup>3</sup>



Ilia Radashkevich<sup>1</sup>



Yoav Segal<sup>1</sup>



Dror Lazar<sup>1</sup>



Udi Virobnik<sup>1</sup>



Mike Peng Li<sup>4</sup>



Ariel Cohen<sup>1</sup>

<sup>1</sup>Intel, Jerusalem, Israel

<sup>2</sup>Intel, Bangalore, India

<sup>3</sup>Intel, Hillsboro, OR

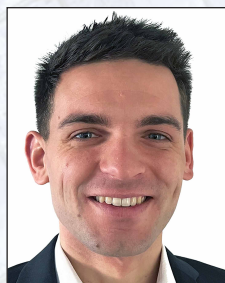
<sup>4</sup>Intel, San Jose, CA

### Anantha P. Chandrakasan Award for Distinguished-Technical Paper

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## 2024 Jan Van Vessem Award for Outstanding European Paper

“A Stacking Mixer-First Receiver Achieving >20dBm Adjacent-Channel IIP3 Consuming less than 25mW”



Stef van Zanten



Ronan van der Zee



Bram Nauta

University of Twente, Enschede, The Netherlands

### The Jan Van Vessem Award for Outstanding European Paper

Jan Van Vessem served ISSCC as the first Chair of the European Program Committee from 1968 to 1974. The Award in his honour is based on ratings by Conference attendees in the previous year.



## 2024 Takuo Sugano Award for Outstanding Far-East Paper

“A 12GS/s 12b 4× Time-Interleaved Pipelined ADC with Comprehensive Calibration of TI Errors and Linearized Input Buffer”



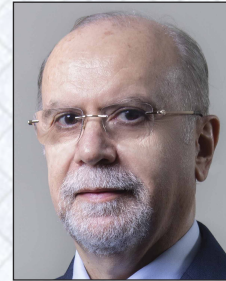
Yuefeng Cao<sup>1</sup>



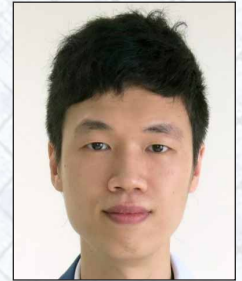
Minglei Zhang<sup>1</sup>



Yan Zhu<sup>1</sup>



Rui P. Martins<sup>1,2</sup>



Chi-Hang Chan<sup>1</sup>

<sup>1</sup>University of Macau, Macau, China

<sup>2</sup>Instituto Superior Tecnico/University of Lisboa, Lisbon, Portugal

**The Takuo Sugano Award for Outstanding Far-East Paper**

**Takuo Sugano** served ISSCC as an early member of what became the Far-East Program Committee, from 1967 to 1989. The Award in his honour is based on ratings by Conference attendees in the previous year.

## 2024 Jack Kilby Award for Outstanding Student Paper

“0.25-to-4GHz Harmonic-Resilient Receiver with Built-In HR at Antenna and BB Achieving +14/+16.5dBm 3<sup>rd</sup>/5<sup>th</sup> IB Harmonic B<sub>1dB</sub>”



Soroush Araei



Shahabeddin Mohin



Negar Reiskarimian

Massachusetts Institute of Technology, Cambridge, MA

**The Jack Kilby Award for Outstanding Student Paper**

**Jack Kilby**, an integrated-circuits pioneer responsible for designing the first monolithic IC, was a long-term ISSCC participant and contributor. The Award in his honour is based on ratings by Conference attendees in the previous year.

## 2024 ISSCC Award for Outstanding Forum Presenter

“Extending and Augmenting Analog with Digital to Overcome Technology Scaling Limitations”



Alvin L. S. Loke

IEEE Solid-State Circuits Society, San Diego, CA

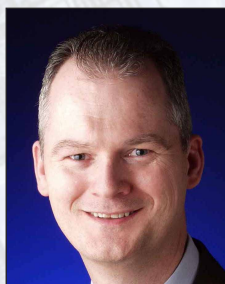
**The Outstanding Forum-Presenter Award**

This Award is based on Forum-attendee ratings from the previous year.



## 2024 ISSCC Award for Outstanding Forum Presenter

“Prediction and Mitigation of Spurs in Fractional Synthesizers”



**Michael Peter Kennedy**

University College Dublin, Dublin, Ireland

**The Outstanding Forum-Presenter Award**

This Award is based on Forum-attendee ratings from the previous year.

## 2024 Demonstration Session Award

“LSPU: A Fully Integrated Real-Time LiDAR-SLAM SoC with Point-Neural-Network Segmentation and Multi-Level kNN Acceleration”



**Jueun Jung<sup>1</sup>**

With:

Jueun Jung<sup>1</sup>, Seungbin Kim<sup>1</sup>, Bokyoung Seo<sup>1</sup>, Wuyoung Jang<sup>1</sup>, Sangho Lee<sup>1</sup>, Jeongmin Shin<sup>1</sup>, Donghyeon Han<sup>2</sup>, Kyuho Jason Lee<sup>1</sup>

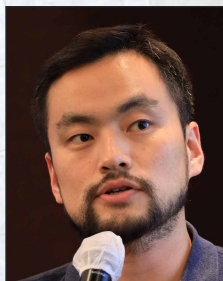
<sup>1</sup>Ulsan National Institute of Science and Technology, Ulsan, Korea, <sup>2</sup>Massachusetts Institute of Technology, Cambridge, MA

**Demonstration-Session Award**

This Award is based on ratings provided by the Demo-Session Committee from the previous year.

## 2024 Demonstration Session Award

“ATOMUS: A 5nm 32TFLOPS/128TOPS ML System-on-Chip for Latency Critical Applications”



**Jinwook Oh**

With:

Yoonho Boo, Jaewan Bae, Minjae Kwon, Karim Charfi, Jinseok Kim, Hongyun Kim, Myeongbo Shim, Changsoo Ha, Wongyu Shin, Jae-Sung Yoon, Miock Chi, Byungjae Lee, Sungpill Choi, Donghan Kim, Jeongseok Woo, Seokju Yoon, Hyunje Jo, Hyunho Kim, Hyungseok Heo, Young-Jae Jin, Jiun Yu, Jaehwan Lee, Hyunsung Kim, Minhoo Kang, Seokhyeon Choi, Seung-Goo Kim, Myunghoon Choi, Jungju Oh, Yunseong Kim, Haejoon Kim, Sangeun Je, Junhee Ham, Juyeong Yoon, Jaedon Lee, Seonhyeok Park, Youngseob Park, Jaebong Lee, Boeui Hong, Jaehun Ryu, Hyunseok Ko, Kwanghyun Chung, Jongho Choi, Sunwook Jung, Yashael Faith Arthanto, Jonghyeon Kim, Heejin Cho, Hyebin Jeong, Sungmin Choi, Sujin Han, Junkyu Park, Kwangbae Lee, Sung-il Bae, Jaeho Bang, Kyeong-Jae Lee, Yeongsang Jang, Jungchul Park, Sanggyu Park, Jueon Park, Hyein Shin, Sunghyun Park

Rebellions, Seongnam-si, Korea

**Demonstration-Session Award**

This Award is based on ratings provided by the Demo-Session Committee from the previous year.





**Solid-State Circuits Society Awards**

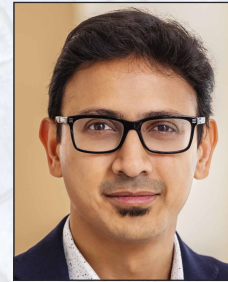
**2023 Journal of Solid-State Circuits Best Paper Award**  
**Deep-Learning-Based Inverse-Designed Millimeter-Wave Passives and Power Amplifiers**



**Emir Ali Karahan**



**Zheng Liu**



**Kaushik Sengupta**

Princeton University, Princeton, NJ

**2024 IEEE SSCS Chapter of the Year Award**  
**Kerala Section SSCS Chapter (India)**



**Ajith Ravindran**



**Muhammed Kasim S**



**T. E. Ayoob Khan**



**Er. Agi Joseph George**

**2024 IEEE SSCS Chapter of the Year Award**  
**Taipei SSCS Chapter (Taiwan)**



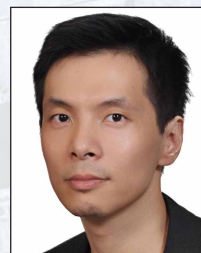
**Yu-Te Liao**



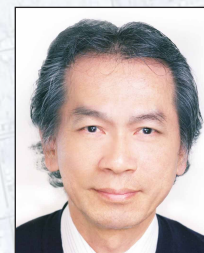
**Po-Hung Chen**



**Yun-Shiang Shu**



**Tsung-Te Liu**



**Chorng-Kuang Wang**



**Tsung-Hsien Lin**





## Solid-State Circuits Society Awards

### 2024 IEEE SSCS Student Branch Chapter of the Year Award

National Engineering School of Sfax SSCS Student Branch Chapter (Tunisia)



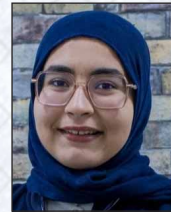
Hend Belkhiria



Hadil Khelifi



Intidhar Chneb



Samar Kharrat



Aziz Kacem



Hassen Rekik



Islem Loued



Ahdi Mrad



Mohamed Ksibi



Mortadha Trabelsi



Brahim Mezghani



Amen Allah Saidi



Zeineb Garali



Salmen Ismail



Chaima El Abed



Eya Walha



Abderrahim Meksi



Emna Ben Hadj



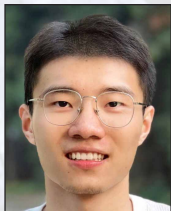
Alaa Ghzaiei



Linda Siwar Gouja

### 2024 IEEE SSCS Student Branch Chapter of the Year Award

Tsinghua University SSCS Student Branch Chapter (China)



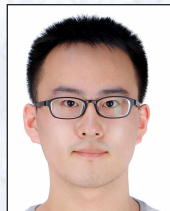
Jiaxin Lei



Taoming Guo



Yahao Song



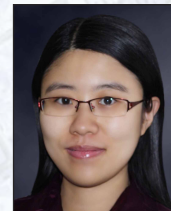
Chaoyang Xing



Yuan Ma



Chao Zhang



Milin Zhang





## Solid-State Circuits Society Awards

### 2024 SSCS Chapter with Best Educational Program Award

National Engineering School of Sousse SSCS Student Branch Chapter (Tunisia)



Habiba Bouras



Al Aziza Mariam Lanouar



Nada Nar



Mariam Gafsi



Amira Tmar



Sonia Eloued

### 2024 Chapter with Best Distinguished Lecturer Program

Central Texas SSCS/CASS Joint Chapter (USA)



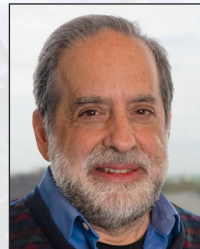
Stefano Pietri



Ravi Kumaraguntla



Mikko Sojonen



John Khoury



Alessandro Piovaccari

### 2024 Chapter with Best Distinguished Lecturer Program

Oregon Section SSCS Chapter (USA)



Richard Dorrance



Deepak Dasalukunte



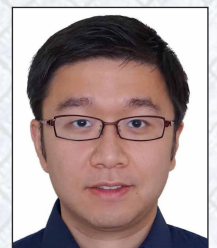
Agajan Suwhanov



Lee Oien



Farhana Sheikh



Renzhi Liu





**IEEE** Technical Field Awards

## 2025 IEEE Donald O. Pederson Award in Solid-State Circuits



**Michiel S. J. Steyaert**  
KU Leuven, Leuven, Belgium

The IEEE annually recognizes outstanding contributors worldwide to the art and science of electro- and information technologies with technical awards in 3 dozen technical specialties. The IEEE Donald O. Pederson Award for Solid-State Circuits for outstanding contributions in the field of solid-state circuits goes to an individual or team of not more than three. The award includes a bronze medal, certificate, and cash honorarium which are presented at the ISSCC.





# IEEE

## 2025 Fellows



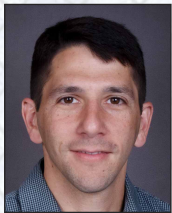
**Kamran Entesari**  
Texas A&M University, College Station, TX



**Aarno Pärssinen**  
University of Oulu, Oulu, Finland



**Makoto Takamiya**  
University of Tokyo, Tokyo, Japan



**Brian Ginsburg**  
Texas Instruments, Dallas, TX



**Nils Pohl**  
Ruhr-Universität Bochum, Bochum, Germany



**Adrian J. Tang**  
NASA Jet Propulsion Laboratory/Caltech, Pasadena, CA



**Chih-Ming Hung**  
National Chiao Tung University, Hsinchu, Taiwan



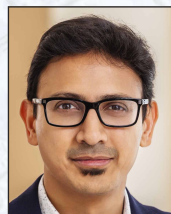
**Patrick Schaumont**  
Worcester Polytechnic Institute, Worcester, MA



**Kea-Tiong Tang**  
National Tsing Hua University, Hsinchu, Taiwan



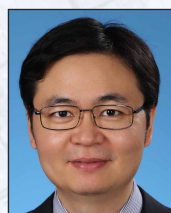
**Patrick Mercier**  
University of California, San Diego, CA



**Kaushik Sengupta**  
Princeton University, Princeton, NJ



**Shouyi Yin**  
Tsinghua University, Beijing, China



**Nan Sun**  
Tsinghua University, Beijing, China




**To see all SSCS award winners, scan the QR code:**



**and then use the Quick Links at the bottom of the webpage**





Note that all ISSCC Awards are scrutinized and vetted by a special group,  
the Awards and Recognition Committee (ARC)  
whose current members are:

Bryan Ackland (Old Bridge, NJ)  
Anantha Chandrakasan (MIT) Chair  
Nicky Lu (Etron)  
Laura Fujino, University of Toronto (member-at-large)