

## **Press Release**

# EDAA Achievement Award 2023 goes to Jason Cong



The Achievement Award is given to individuals who made outstanding contributions to state of the art in electronic design, automation and testing of electronic systems in their life. To be eligible, candidates must have made innovative contributions that impacted how electronic systems are being designed.

Past recipients have been Kurt ANTREICH (2003), Hugo DE MAN (2004), Jochen JESS (2005), Robert BRAYTON (2006), Tom W. WILLIAMS (2007), Ernest S. KUH (2008), Jan M. RABAEY (2009), Daniel D. GAJSKI (2010), Melvin A. BREUER (2011), Alberto L. SANGIOVANNI-VINCENTELLI (2012), Peter MARWEDEL (2013), Rolf ERNST (2014), Lothar THIELE (2015), Giovanni DE MICHELI (2016), C. L. David LIU (2017), Mary Jane IRWIN (2018), Jacob ABRAHAM (2019), Luca BENINI (2020), Georges GIELEN (2021), and Edward A. LEE (2022).

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Dr. Jason Cong is the Volgenau Chair for Engineering Excellence in the UCLA Computer Science Department (with a joint appointment in the Department of Electrical and Computer Engineering), the Director of the Center for Domain-Specific Computing (funded by NSF Expeditions in Computing Award), and the director of VLSI Architecture, Synthesis, and Technology (VAST) Laboratory. He served as the chair of the UCLA Computer Science Department from 2005 to 2008. He is the author of more than 500 papers, including 17 Best Paper Awards. Dr. Cong's research publications have close to 35,000 citations, according to Google Scholar, and he is a frequent keynote speaker at major conferences in EDA and design automation. He has graduated 44 PhD students.

Professor Cong received his B.S. degree in computer science from Peking University in 1985, his M.S. and Ph. D. degrees in computer science from the University of Illinois at Urbana-Champaign in 1987 and 1990, respectively. Then, he joined UCLA as faculty. His research group at UCLA studies electronic design automation (EDA), customized computing for machine learning and big-data applications, quantum computing, and highly scalable algorithms. Dr. Cong has also led a multi-university group that looked beyond parallelization and focused on domain-specific customization to achieve drastic power-performance efficiency improvement. His group has worked on domain-specific computing to multiple critical application domains, such as healthcare, machine learning, and large-scale data processing.



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Dr. Cong is a successful entrepreneur. He was the founder and the president of Aplus Design Technologies, which was acquired by Magma Design Automation in 2003 (now part of Synopsys). Dr. Cong was also a co-founder and the chief technology advisor of AutoESL Design Technologies, which commercialized the research from his lab on high-level synthesis (HLS) for the automatic synthesis of behavior-level C/C++ specifications into highly optimized RTL code. The AutoESL tool (renamed to Vivado HLS after Xilinx acquisition in 2011) has become one of the most successful and most widely used FPGA HLS tools in history, with tens of thousands of users worldwide. He also co-founded Neptune Design Automation (2011-2013), which produced the fastest and most scalable FPGA physical design tool at its time (acquired by Xilinx in 2013). Then, he was co-founder, chairman, and chief scientific advisor of Falcon Computing Solutions, which provides compilation tools and accelerator IPs to enable FPGA-based acceleration for data centers and edge computing (again acquired by Xilinx in 2020).

Cong is an IEEE Fellow, an ACM Fellow, a member of the National Academy of Engineering in 2017, and a Fellow of the National Academy of Inventors in 2020. Among many awards, he has received the ACM/IEEE A. Richard Newton Technical Impact Award in EDA, the IEEE Robert N. Noyce Medal for fundamental contributions to EDA and FPGA design methods in 2022, and, now, the 2023 European Design and Automation Association (EDAA) Achievement Award.

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EDAA is a non-profit association. Its purpose is to operate for educational, scientific and technical purposes for the benefit of the international electronics design and design automation community. The Association, in the field of design and design automation of electronic circuits and systems, promotes a series of high quality technical international conferences and workshops across Europe and cooperates actively to maintain harmonious relationships with other national and international technical societies and groups promoting the purpose of the Association. EDAA is the main sponsor of DATE, the premier Design, Automation and Test Conference and Exhibition in Europe.