Dr. Rob A. Rutenbar of the University of Pittsburgh Honored with 2017 Phil Kaufman Award

Cited for Contributions to Analog Design Automation, Impact on EDA Education

REDWOOD CITY, CALIF. — October 18, 2017 — Dr. Rob A. Rutenbar, senior vice chancellor for Research at the University of Pittsburgh, has been selected as the recipient of the 2017 Phil Kaufman Award for Distinguished Contributions to Electronic System Design.

The award is presented yearly by the Electronic System Design Alliance (ESD Alliance) and the IEEE Council on Electronic Design Automation (CEDA). The award ceremony and dinner will be held in Silicon Valley, Calif., Thursday, February 8. More details will be available shortly.

Dr. Rutenbar is being honored for his pioneering contributions to algorithms and tools for analog and mixed-signal designs. As an academic, he developed a wide range of fundamental models, algorithms and tools for analog integrated circuit (IC) designs. As an entrepreneur, he co-founded Neolinear, one of the most successful analog tool companies, to bring his research efforts to the larger design community.

While at Carnegie-Mellon University (CMU) from 1984 through 2010, Dr. Rutenbar was founder and director of the Center for Circuit and System Solutions (C2S2), chartered by major
U.S. semiconductor companies and the Defense Advanced Projects Research Agency (DARPA).

“For most of the early 21st century, C2S2 was an essential part of the U.S. funding ecosystem for analog and mixed-signal research,” says Dr. Martin Wong, executive associate dean of the College of Engineering at the University of Illinois. “C2S2 faculty pioneered a range of important technologies, notably in statistical circuit design and lithography-aware chip design.”

Dr. Rutenbar moved to the University of Illinois Urbana-Champaign to head the Computer Science Department in 2010, a time when many universities were reducing EDA courses. He reworked his CMU course, “VLSI CAD: Logic to Layout,” into a Massive, Open, Online Course (MOOC) in 2013, providing EDA training to thousands of engineers; to date, his course has connected with over 50,000 registered learners from more than 150 countries.

Success in both industry and academia comes as no surprise to those who know Dr. Rutenbar. Tom Beckley, Cadence Design Systems’ senior vice president of Custom IC & PCB, observes, “Rob is first and foremost an outstanding teacher, who always puts his students first. His students are not only skilled in EDA, but also in communications, innovation, working as team players, and share Rob’s passion and strong work ethic.”

According to Dr. Patrick Groeneveld, past chair of the Design Automation Conference, sponsored by the ESD Alliance and CEDA: “Rob combines several qualities that make him uniquely qualified as a Phil Kaufman Award recipient: thorough academic research, educational excellence, and a successful business enterprise that commercialized the research. Such a combination is rare in EDA, and has been a key ingredient for the vibrancy of our field.”

Dr. John Cohn, chief scientist at IBM Watson IoT and an IBM and IEEE fellow concludes: “The Phil Kaufman Award is the closest thing there is to a Nobel Prize for EDA. As such, I can think of no one more deserving of this award than Rob Rutenbar.”
About Dr. Rob A. Rutenbar, the 2017 Phil Kaufman Award Recipient

Rob A. Rutenbar joined the faculty at CMU after receiving a Ph.D. from the University of Michigan, spending 25 years in Electrical and Computer Engineering, ultimately holding the Stephen J. Jatras (E’47) chair. In 2010, he moved to the University of Illinois at Urbana-Champaign, where he was the Abel Bliss professor and head of Computer Science. He joined the University of Pittsburgh this year and currently serves as senior vice chancellor for Research.

His research has focused on: tools and algorithms for core IC design problems; methods to manage the statistics of nanoscale chip design; and custom silicon architectures for perceptual and data analytics problems, in applications such as speech recognition and machine learning. His work has been featured in venues ranging from EE Times to the Economist.

In 1998, he co-founded Neolinear, Inc., to commercialize the first practical synthesis tools for analog and mixed-signal ICs and served as its chief scientist until its acquisition by Cadence in 2004. In 2006, he founded the Silicon Vox Corporation, now called Voci Technologies Inc., to commercialize high-speed, high-accuracy speech recognition appliances for enterprise voice analytics applications.

About the Phil Kaufman Award

The Phil Kaufman Award honors individuals who have had a demonstrable impact on the field of electronic system design through technology innovations, education/mentoring, or business or industry leadership. The award was established as a tribute to Phil Kaufman, the late industry pioneer who turned innovative technologies into commercial businesses that have benefited electronic designers. Last year’s recipient was Andrzej J. Strojwas, Keithley Professor of Electrical and Computer Engineering at Carnegie Mellon University, recognized for his pioneering research in the area of design for manufacturing in the semiconductor industry.
About the IEEE Council on Electronic Design Automation (CEDA)


In order to promote the recognition of leading EDA professionals, the Council sponsors the A. Richard Newton, Phil Kaufman, and Ernest S. Kuh Early Career Awards. The Council welcomes new volunteers and local chapters.

**Stay in touch with IEEE CEDA:**
Website: [www.ieee-ceda.org](https://www.ieee-ceda.org)
LinkedIn: [https://www.linkedin.com/groups/8343531](https://www.linkedin.com/groups/8343531)
Facebook: [https://www.facebook.com/ieeeceda/](https://www.facebook.com/ieeeceda/)
Twitter: [https://twitter.com/IEEECEDA](https://twitter.com/IEEECEDA)

About the Electronic System Design Alliance

The [Electronic System Design (ESD) Alliance](https://esd-alliance.org), an international association of companies providing goods and services throughout the semiconductor design ecosystem, is a forum to address technical, marketing, economic and legislative issues affecting the entire industry. It acts as the central voice to communicate and promote the value of the semiconductor design industry as a vital component of the global electronics industry.

**Follow the ESD Alliance:**
Website: [esd-alliance.org](https://esd-alliance.org)
ESD Alliance Bridging the Frontier blog: http://bit.ly/2oJUVzl
Twitter: @ESDAlliance
LinkedIn: https://www.linkedin.com/groups/8424092
Facebook: https://www.facebook.com/ESDAlliance

All trademarks and registered trademarks are the property of their respective owners.