

CONNECTIONS

LATEST NEWS AND UPDATES FROM
SEMICONDUCTOR RESEARCH CORPORATION



PARTNERS IN PACKAGING

On November 5, SRC President and CEO Todd Younkin met with Purdue President Mitch Daniels and CHIRP Center leader Ganesh Subbarayan to present a \$735,000 award, signaling our continued and growing commitment to Microelectronics and Advanced Packaging Technologies. "SRC's award confirms the strength of our partnership with Purdue in the microelectronics revolution," said Todd Younkin. "We look forward to expanding this partnership, with government participation, to take a giant leap forward and address the enormous possibilities for the industry and our country." Over the last four years, SRC and its members and participants have invested \$48M in Purdue and its university partners through GRC, JUMP, and nCORE. Learn about Purdue's recent [Microelectronics and Advanced Packaging Workforce Development workshop](#).

READ ON FOR MORE
NEWS AND UPDATES!

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Faith Isowamwen Receives Simon Karecki Award

Osakpolo "Faith" Isowamwen, a Ph.D. student at Clarkson University, is the recipient of the 2021 Simon Karecki Award. Now in its 20th year, the award recognizes outstanding students contributing to environmental research. A member of Professor Selma Mededovic Thagard's research group, Faith focuses on the treatment of long and short-chain poly-and perfluoroalkyl substances (PFAS) in Fab wastewater using electrical discharge plasma. [Read the full announcement.](#)



Stanford Researchers Win Prestigious SIA-SRC Award

Dr. Subhasish Mitra and Dr. Boris Murmann are the 2021 recipients of SIA-SRC University Research Awards. "Professors Mitra and Murmann have been instrumental in advancing chip technology," said John Neuffer, SIA president and CEO, "and we are pleased to recognize them for their outstanding achievements." [Read the press release.](#)



Maverick Sweep at TECHCON 2021

Read a great [write up](#) on the three UT Arlington doctoral students—(left to right) [Jimmy-Bao Le](#), [Mohsen Tajedini](#) and [Allison Osmanson](#)—who earned Best Student Presenter Awards at TECHCON 2021. Congratulations, Mavericks!



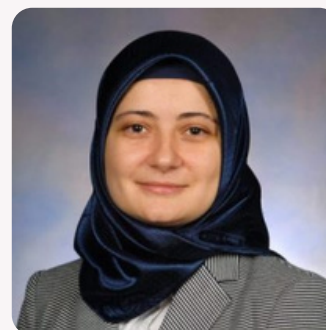
Raychowdhury Elevated to IEEE Fellow

Congratulations to Dr. Arijit Raychowdhury, SRC's [2021 Technical Excellence Award](#) winner, for being elevated to [IEEE Fellow Class of 2022!](#) This is another acknowledgement of the innovative research and leadership in the field of energy-efficient adaptive integrated circuits. Over the last decade, Dr. Raychowdhury has led or been instrumental in 70 different research projects at SRC, across GRC and JUMP, and is the leader of the Center for Brain-inspired Computing Enabling Autonomous Intelligence's Neuromorphic Fabrics ([CBRIC-T2](#)).



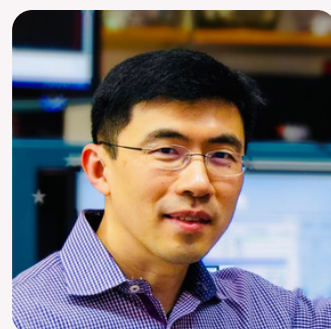
Yavuz Hardware Security Keynote

Watch an excellent keynote from Dr. Tuba Yavuz of University of Florida at the Individualized Cybersecurity Research Mentoring (iMentor) Workshop 2021, an ACM CCS pre-conference workshop. Dr. Yavuz' Hardware Security Research focuses on automated methods for finding security vulnerabilities and is integral to her keynote: "[Securing the IoT using Model Guided Analysis.](#)"



Kai Liu to Chair IUPAP Commission

Congratulations to SMART Center Professor Kai Liu on being elected Chair of the Commission on Magnetism at the 30th General Assembly of the International Union of Pure and Applied Physics (IUPAP). Prof. Liu was nominated by the National Academy of Sciences and the American Physical Society. He has served as Secretary of the C9 Commission, and will serve as Chair for the 2022-2024 term.



Jason Cong Receives IEEE Noyce Medal

Congratulations to CRISP Prof. Jason Cong on receiving the [2022 IEEE Robert N. Noyce Medal](#) for "fundamental contributions to electronic design automation and FPGA design methods." The award is presented by the IEEE for outstanding contributions to the microelectronics industry. Named in honor of Intel founder Robert N. Noyce, renowned for his 1959 invention of the integrated circuit, the award is funded by Intel and was first awarded in 2000. Past winners include TSMC's Morris Chang, Intel's Craig Barrett, and AMD CEO Lisa Su.



*Upcoming Events**Industry-Led Talks***Package Development for Autonomous Driving**

As part of our Industry-Led Talks series, Darrel Frear, Senior Director at NXP Semiconductors, will present "Package Development for Autonomous Driving." He'll be discussing the types of electronic systems being developed at NXP for autonomous driving, including the use of automotive radar to sense the vehicle environment; microcontrollers to process sensed information; and automotive analog devices for control functions. His talk will focus on the advanced package required to enable these automotive devices and the packaging materials needed. Register [here](#) and watch replays of previous talks.



*Top 5 SRC Publications
Viewed Across All Programs*

Don't miss the papers that received the most views on the SRC website over the last six weeks. Members of the associated programs have early access to the pre-publications.

- Transient Adjoint Sensitivity and Its Applications—SRC Pub ID: [P105787](#)
- ESD Considerations for the Codesign of PAM4 Frontend Receivers—SRC Pub ID: [P102085](#)
- IMPACT Research Center nCORE Review Presentation Slides and Appendix—SRC Pub ID: [P105769](#)
- Advanced Gate Stack Design of Ferroelectric Transistor for Scaling towards 7nm FinFET Platform—SRC Pub ID: [P103656](#)
- SMUL-FFT: A Streaming Multiplierless Fast Fourier Transform—SRC Pub ID: [P102070](#)