

CONNECTIONS

LATEST NEWS AND UPDATES FROM
SEMICONDUCTOR RESEARCH CORPORATION

TECHCON 2021 AWARD WINNERS



TECHCON 2021 may have ended, but the connections continue. We had 150 SRC Research Scholars present cutting-edge research on five tracks that aligned with the seismic shifts outlined in SRC's [Decadal Plan for Semiconductors](#). We announced 41 [Mahboob Khan Outstanding Liaison Award](#) winners. And, of course, we announced the winners of our [SRC Annual awards](#).

- [SRC CHAMPION](#): Dr. Mandy Pant, Intel
- [ARISTOTLE AWARD](#): Dr. Krishna Saraswat, Stanford University
- [TECHNICAL EXCELLENCE AWARD](#): Dr. Arijit Raychowdhury, Georgia Institute of Technology
- [YOUNG FACULTY AWARD](#): Dr. Judy Cha, Yale

Visit us on [YouTube](#) to meet the winners and hear what the awards mean to them.

READ ON FOR MORE
NEWS AND UPDATES!

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Rising Star Award Winners

Two SRC researchers won Intel 2021 Rising Star Awards. Dr. Arkaprava Basu from the Indian Institute of Science was recognized for his research in the [India Research Program](#) (IRP). Dr. Chris Fletcher of the University of Illinois at Urbana-Champaign was recognized for his research in [Hardware Security](#) (HWS). Congratulations to these early career researchers shaping innovation in the future of computing.



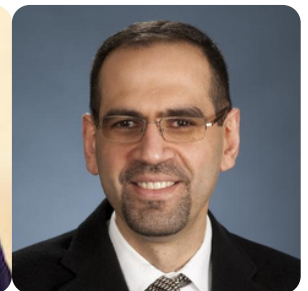
C-BRIC Team Wins Best Paper at ICONS

Congratulations to C-BRIC researchers Maryam Parsa, [Nitin Rathi](#), and Kaushik Roy at Purdue University, who won the Best Paper Award at the International Conference on Neuromorphic Systems (ICONS) called "Accurate and Accelerated Neuromorphic Network Design Leveraging A Bayesian Hyperparameter Pareto Optimization Approach."



Collaboration Yields Results

The collaboration of four SRC Hardware Security researchers has led to a new business venture. [Caspia Technologies](#) is a spin-off of the [Florida Institute for Cybersecurity Research](#) (FICS) at UF. The organization was established to advance entrepreneurial activities for faculty and to produce much-needed innovative solutions for commercial use in the area of microelectronics security. Congratulations to Mark M. Tehranipoor, Waleed Khalil, Farimah Farahmandi and Navid Asadi!





Raychowdhury Earns Qualcomm Faculty Award

Congratulations to Arijit Raychowdhury at the Georgia Institute of Technology, winner of SRC's 2021 Technical Excellence Award, on receiving a 2021 Qualcomm Faculty Award. His research in [AI Hardware](#) and [JUMP](#) has been recognized for enabling low-power System-on-Chip (SoC) designs to improve the capability and power efficiency of their current and future productions.



Ruby B. Lee Keynote at VLSI-SoC 2021

Princeton University's Ruby B. Lee will be giving a keynote titled "Preventing Secret Leaks from Edge Devices" at the 29th IEEE International Conference on Very Large Scale Integration (VLSI-SoC 2021), Lee's research in [Hardware Security](#) has enabled wide-spread usage of secure RISC-V open-source microprocessors. Full event details are [here](#).



Shimeng Yu at IEDM 2021

[SRC's 2019 Young Faculty Award Winner](#), Dr. Shimeng Yu has two papers that have been accepted to the IEEE International Electron Devices Meeting (IEDM) 2021 plus another four collaborative papers with ASCENT researchers Prof. Asif Khan, Prof. Suman Datta, and Prof. Peide Ye. Since 2008, he has authored or co-authored 40 IEDM papers. Congratulations!



Onur Mutlu AI Keynote

Onur Mutlu delivered an excellent keynote at the TUBA World Conference on Energy Science and Technology. His research in [Artificial Intelligence Hardware](#) was acknowledged as part of his talk, "Intelligent Architectures for Intelligent Machines, which delved into the large problems we need to tackle to make our computing platforms fundamentally more intelligent and more efficient.

*Upcoming Events***From Failure to Success Series**

Success is often preceded by a series of failed attempts, though we don't always hear about the setbacks. SRC's "From Failure to Success" speaker series shines a light on failure with leading experts. It's a side of research that isn't often discussed, despite the many benefits it provides in charting a course for success. Join us on October 27 as we welcome ASCENT director Prof. Suman Datta from the University of Notre Dame. Visit the [SRC event calendar](#) for details



***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.

- AURITUS: An Open-Source Earable Computing Framework for Human Movement Data Collection, Processing, and Analysis—SRC Pub ID [P105076](#)
- Epitaxial Aluminum Nitride Piezoelectric Resonators For High-Speed RF Circuits and Microwave Qubits—SRC Pub ID [P104663](#)
- Hedwig: Robust Deep Learning Through Adversarial Training and Runtime Detection—Pub ID [P104655](#)
- mm-Wave Antennas, Beamformers, and Switches—SRC Pub ID [P104450](#)
- Architecture and DfT Methods for Improving Life Time Reliability and Functional Safety of Electronic Circuits and Systems Out of Application Context _ Annual Review—SRC Pub ID [P103379](#)