

Dr. Selçuk Köse received his B.S. degree in electrical and electronics engineering from Bilkent University, Ankara, Turkey, in 2006, and the M.S. and Ph.D. degrees in electrical engineering from the University of Rochester, Rochester, New York, respectively, in 2008 and 2012. He previously worked at TUBITAK, Ankara, Turkey, at Intel Corporation, Santa Clara, California, and at Freescale Semiconductor, Tempe, Arizona. Dr. Köse received NSF CAREER Award in 2014, USF College of Engineering Outstanding Research Achievement Award in 2014, and Cisco Research Award in 2015.

Research Interests

His current research interests include the design and analysis of high performance integrated circuits, on-chip DC-DC voltage converters, 3-D integration, green computing, and hardware security with specific emphasis on countermeasures against side-channel attacks, runtime hardware Trojan detection and mitigation, and mathematical foundations of security-performance metrics.

Recent Publications

- W. Yu and S. Köse, "Time-Delayed Converter-Reshuffling: An Efficient and Secure Power Delivery Architecture," IEEE Embedded Systems Letters, (accepted May 2015).
- W. Yu, O. A. Uzun, and S. Köse, "Leveraging On-Chip Voltage Regulators as a Countermeasure Against Side-Channel Attacks," Proceedings of the IEEE/ACM Design Automation Conference (DAC), pp. 1 - 6, June 2015.
- O. A. Uzun and S. Köse, "Converter-Gating: A Power Efficient and Secure On-Chip Power Delivery System," IEEE Journal on Emerging and Selected Topics in Circuits and Systems, Vol. 4, No. 2, pp. 169 - 179, June 2014.
- I. Vaisband, M. Azhar, E. G. Friedman, and S. Köse, "Digitally Controlled Pulse Width Modulator for On-Chip Power Management," IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 22, No. 12, pp. 2527 - 2534, December 2014.
- S. Köse, "Thermal Implications of On-Chip Voltage Regulation: Upcoming Challenges and Possible Solutions," Proceedings of the IEEE/ACM Design Automation Conference (DAC), pp. 1 - 6, June 2014.

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