

Saraju P. Mohanty, Professor

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A. Professional Preparation

Orissa University of Agriculture and Technology	Bhubaneswar, India	Electrical Engineering	Bachelor of Technology	1995
Indian Institute of Science	Bengaluru, India	System Science and Automation	Master of Engineering	1999
University of South Florida	Tampa, USA	Computer Science and Engineering	Doctor of Philosophy	2003

B. Appointments

June 2015 – Present	Professor	Computer Science and Engineering	University of North Texas
June 2010 – May 2015	Associate Professor	Computer Science and Engineering	University of North Texas
Sep 2004 – May 2010	Assistant Professor	Computer Science and Engineering	University of North Texas
Jan 2000 – Dec 2003	Instructor	Computer Science and Engineering	University of South Florida

C. Products

1. Five Products Related to the Proposed Project

1. S. P. Mohanty, E. Kougiianos, and P. Guturu, “SBPG: Secure Better Portable Graphics for Trustworthy Media Communications in the IoT (Invited Paper)”, *IEEE Access*, Volume 6, 2018, pp. 5939–5953.
2. A. Sengupta, D. Roy, S. P. Mohanty, and P. Corcoran, “DSP Design Protection in CE through Algorithmic Transformation Based Structural Obfuscation”, *IEEE Transactions on Consumer Electronics (TCE)*, Volume 63, Issue 4, November 2017, pp. 467–476.
3. A. Sengupta, S. Bhadauria, and S. P. Mohanty, “TL-HLS: Methodology for Low Cost Hardware Trojan Security Aware Scheduling with Optimal Loop Unrolling Factor during High Level Synthesis”, *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, Volume 36, Issue 4, April 2017, pp. 655–668.
4. A. Sengupta, D. Roy, and S. P. Mohanty, “Triple-Phase Watermarking for Reusable IP Core Protection during Architecture Synthesis”, *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, Volume 37, Issue 4, 2018, pp. 742–755.
5. S. P. Mohanty, U. Choppali, and E. Kougiianos, “Everything You wanted to Know about Smart Cities”, *IEEE Consumer Electronics Magazine (CEM)*, Volume 5, Issue 3, July 2016, pp. 60–70 (**Awarded Best Paper of the IEEE Consumer Electronics Magazine for the Year 2016.**).

2. Five Other Significant Products

1. E. Kougiianos, S. P. Mohanty, G. Coelho, U. Albalawi, and P. Sundaravadivel, “Design of a High-Performance System for Secure Image Communication in the Internet of Things (Invited Paper)”, *IEEE Access Journal*, Volume 4, 2016, pp. 1222–1242.

2. M. Sarkar, P. Ghosal, and S. P. Mohanty, "Exploring the Feasibility of a DNA Computer: Design of an ALU using Sticker Based DNA Model", *IEEE Transactions on NanoBioscience (TNB)*, Volume 16, Issue 6, September 2017, pp. 383-399.
3. O. Okobiah, S. P. Mohanty, and E. Kougiannos, "Fast Layout Optimization through Simple Kriging Metamodeling: A Sense Amplifier Case Study", *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, Volume 22, Issue 4, April 2014, pp. 932-937.
4. D. Ghai, S. P. Mohanty, and E. Kougiannos, "Design of Parasitic and Process Variation Aware RF Circuits: A Nano-CMOS VCO Case Study", *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, Vol. 17, No. 9, September 2009, pp. 1339-1342.
5. V. P. Yanambaka, S. P. Mohanty, E. Kougiannos, D. Ghai, and G. Ghai, "Process Variation Analysis and Optimization of a FinFET based VCO", *IEEE Transactions on Semiconductor Manufacturing (TSM)*, Volume 30, Issue 02, May 2017, pp. 126-134.

D. Synergistic Activities

1. Awards and Honors

Glorious India Award - Rich and Famous NRIs of America for exemplary contributions to the discipline in 2017; Society for Technical Communication Award of Merit for outstanding contributions to IEEE Consumer Electronics Magazine in 2017; IEEE Distinguished Lecturer by the Consumer Electronics Society in 2017-2018; Best Poster Award (First place with a cash prize of \$1000) at the 30th IEEE MetroCon Conference, 2017; The PROSE Award for best Textbook in Physical Sciences & Mathematics in 2016; UNT Graduate School Toulouse Scholars Award for sustained, outstanding teaching and scholarly achievements in 2016; Editor-in-Chief (EiC), IEEE Consumer Electronics Magazine, 2016-present; Chair, Technical Committee on VLSI (TCVLSI), IEEE-CS, 2014-Present; Received Honors Day recognition as an inspirational faculty at UNT for multiple years; UNT Provost's Thank a Teacher recognition for multiple years; Best Ph.D. Forum Paper Award at the 14th IEEE-CS Symposium on VLSI (ISVLSI), 2015.

2. Professional Leadership

Journal Editorial Board: IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), ACM Journal on Emerging Technologies in Computing Systems (JETC), IEEE Transactions on Nanotechnology, IET Circuits, Devices and Systems (CDS); Editor-in-Chief (EiC), VLSI Circuits and Systems Letter, IEEE-CS TCVLSI, 2015-present. **Conference Chairmanship:** Steering Committee Chair, IEEE International Symposium on Smart Electronic Systems (iSES); Steering Committee Vice-Chair, IEEE-CS Annual Symposium on VLSI (ISVLSI); General Chair, IEEE International Conference on Consumer Electronics (ICCE), 2018; General Chair, IEEE-CS Annual Symposium on VLSI (ISVLSI), 2014.

3. Distinguished Lectures and Keynote Talks

Everything You Wanted to Know About Smart Cities, IEEE Distinguished Lecture, CE Society, 5th Oct 2017; Everything You Wanted to Know about Internet of Things (IoT), IEEE Distinguished Lecture, IEEE CE Society, 16th Nov 2017; Smart Cities - Demystified, Keynote, 2nd International Conference on Man and Machine Interfacing (MAMI), 2017, Bhubaneswar, India, 23rd December 2017; Internet of Things (IoT) - Demystified, Keynote, 16th International Conference on Information Technology (ICIT), 2017, Bhubaneswar, India, 22nd December 2017.

4. Panelist

National Science Foundation (NSF) - Division of Electrical, Communications and Cyber Systems (ECCS); Division of Computer and Network Systems (CNS) - Secure and Trustworthy Cyberspace (SaTC); Division of Computer and Network Systems (CNS) - Cyber Physical Systems (CPS).

5. Mentoring and Curriculum Development

Mentored 2 postdocs, 9 Ph.D. dissertations, 25 Master theses, and 10 undergraduate projects. Developed 5 new courses for the CSE department. Helped in the ABET accreditation of Computer Engineering program. Helped in recruiting quality graduate/undergraduate students for the growth of the department.