Curriculum Vitae
MARTIN MARGALA
Endowed Chair and Eminent Scholar
Senior Member IEEE/ACM/SPIE
Member AAAS, ASEE
Life-Time Member Fulbright Association
School of Computing and Informatics
University of Louisiana at Lafayette
Lafayette, LA, USA
https://scholar.google.com/citations?user=ANcbeNIAAAAJ&hl=en&oi=ao
https://www.linkedin.com/in/martin-margala-243b208/
[redacted]

RELEVANT EDUCATION

Jan 2019-Dec 2019	***UMass Lowell Leadership Academy***, Professional Development for Executives in Higher Education
April 1998	Ph.D. in Electrical and Computer Engineering University of Alberta, Edmonton, Canada
June 1990	M.Sc.(eq.) in Electrical Engineering (specialization Microelectronics) Slovak Technical University, Bratislava, Slovakia, EU

LEADERSHIP WORK EXPERIENCE

Administration

Aug'21-present ***Full Professor and Director of School of Computing and Informatics***
University of Louisiana at Lafayette (flagship R1 of UL System), LA, USA (responsible for three flagship academic/programatic units: Computer Engineering, Computer Science, and Informatics)

Over the period of 4+ years of my tenure as the Director of the School, we have created and launched new MS programs in Informatics that now have become some of the highest growing graduate programs on campus and we have launched new PhD program in Applied Computing and Information Sciences (Fall 2025). We have increased our enrollment using new outreach strategies by 14% (Fall'21-Fall'24). We have also established a critical support system for our tenure-track assistant professors to provide them with the environment where they can thrive and perform at their best. As a result, over the past several years our assistant professors have secured major grant awards, including NSF CAREER, received Best Paper awards, and numerous other accolades. In addition, over the past four years, thanks to the generosity of CS alumns, we have succesfully raised several millions of dollars toward endowed scholarships and professorships and new research initiatives. Furthermore, we have created a new program in collaboration with the local innovation incubator center to provide a steady supply of talent to local start-ups that are in need of significant software/computing development to be able to launch prototypes of their product and/or service. Our students who participate in the program receive first-hand experience of start-up innovative culture. As a result of these and many other initiatives, our peer ranking has increased significantly.

Sep'11-July'21 ***Full Professor and Chair*** (elected 3 times)
Electrical and Computer Engineering Department, University of Massachusetts, Lowell MA, USA

During my tenure as a Department Chair (8+ years so far) I have managed and overseen the largest expansion in the history of the ECE department in the following areas: # of faculty members grew from 21 to 33, which includes replacement hires for 4 retired faculty and 4 that left the department; research income and research expenditures increased 9 times over the past 6 years, undergraduate student enrollment increased by 65%; MS enrollment increased by 48%; PhD enrollment by 29%. Five years ago, we implemented a fully integrated co-op program for sophomore and junior students. During the past three years we placed almost 100 students each, 3x increase since the launch in 2015. For the first time our department developed a long term sustainable strategic plan (2015-2020). We developed an alumni network plan to increase alumni participation and engagement. This resulted in 10 fold increase in established endowment funds for scholarships and research. I replaced our Industrial Advisory Board with new, very engaged members. This led to establishment of major research partnerships and major investment from Raytheon, BAE, RedHat, Analog Devices, Skyworks and many others. I helped to establish partnerships with several Universities abroad and have now very active collaborative programs. I brought to the University several industrial strategic partners. We revived student organizations, IEEE, ACM and SWE which now provide essential services for the students and the department. As a result of all the changes, our department has been climbing significantly in national rankings since 2015.

Service

July'25-present ***P12 Chair, Member of the Leadership Committee, International Division, American Society for Engineering Education***

Feb'23-present ***Member of the Board of Directors, College-Industry Partnership Division, American Society for Engineering Education***
Responsible for creating national policy for College/University-Industry collaboration models.

June'23-June'25 ***Diversity Chair, Member of the Leadership Committee, International Division, American Society for Engineering Education***
Responsible for creating, supporting and sharing best practises for inclusive international engineering education models.

Oct'19-Dec'24 ***Member of iREDEFINE ECEDHA Diversity Workgroup***
Responsible for creating, organizing and running NSF sponsored mentoring program that prepares female and other underrepresented PhD students and Postdocs in ECE for faculty positions and academic careers. We manage the program nationally and in the regions as well. Our iREDEFINE Diversity Workgroup consists of myself and 5 additional ECE Department Chairs/Heads (UW, SeattleU, UWiscMadison, ColoradoState, Embry-Riddle)

Oct'19-July'21 ***Member of Board of Directors***, one of the three founding members, *SCyPS: Center for Smart Cyber Physical Systems*

I am one of the co-founders of this new university research center, a multi-faculty crossdisciplenary research enterprise with about 15 industrial partners.

Oct'19-July'21 ***Co-Director**, UMOVE: Center for Research of Movement*

Mar'15-October 2021 ***Board Member***, Alliance for Science, Technology and Research in America, Washington D.C., USA (www.usinnovation.org)
-major activity of ASTRA is in promoting research and education in STEM disciplines among Congress members and Senators and other government officials. One of the major events is STEM on the Hill (http://www.setcvd.org/)

Sept'18-Dec'23 ***External International Examiner***, University of Limerick, Ireland
Annual examination of education policies, assessment procedures, learning outcomes for the complete BS degree program.

Sep'15-Aug'16 ***Fulbright Distinguished Chair in Electrical Engineering***
Faculty of Electrical Engineering, Czech Technical University, Prague, Czech Republic
- helped to establish new strategic partnerships with US companies operating in the Czech Republic;
- created curriculum for teaching communication and scientific writing for PhD students and postdocs;
- helped the US Embassy in the Czech Republic to organize a seminar series on STEM and brought a prominent speaker Prof Karen Panetta, Associate Dean of Graduate Studies and Professor of ECE at Tufts University;
- participated on a panel on globalization of university education organized by the Fulbright Commission;
- launched a new workshop series sponsored by the US Embassies in the Czech Republic and Slovakia on start-up culture, entrepreneurship and innovation in academia:
- secured the participation of five leading US experts as speakers at the series: Jack Wilson, President Emeritus of the University of Massachusetts System (www.jackmwilson.net), Gururaj Despande, venture capitalist and entrepreneur (en.wikipedia.org/wiki/Gururaj_Deshpande), Nishith Acharya, CEO Citizence and Equal Innovation Institute (www.linkedin.com/in/nishith-nish-acharya-528122), Deborah Walden, Vice President for Development, Station1 University (https://www.linkedin.com/in/deborah-walden-a9b8943), Ellan Spero, Curriculum Chief Officer, Station1 University (www.linkedin.com/in/ellan-spero-b1126a18). The topics included: a) government-university-industry partnerships, b) the role of women in entrepreneurship, c) integrating innovation and entrepreneurship principles into university curriculum;
The audience were Deans and Vice-Deans of universities, Directors and Managers from local companies, CEOs and administrators from education and entrepreneurship non-profits, etc.
- Workshop 2.0 is currently being planned (topics will include: the development of sustainable highly qualified workforce through University-Industry partnerships)

ACADEMIC WORK EXPERIENCE

Aug'21 – Present ***Full Professor, Endowed Chair and Eminent Scholar***
School of Computing and Informatics, University of Louisiana at Lafayette, LA, USA (R1)

Sept'11 – July'21 ***Full Professor***
Electrical and Computer Engineering Department, University of Massachusetts, Lowell MA, USA (R1)

Jan'07 – Aug'11	***Associate Professor*** Electrical and Computer Engineering Department, University of Massachusetts, Lowell MA, USA
July'00 – 2007	***Assistant Professor*** Electrical and Computer Engineering Department, University of Rochester, Rochester NY, USA
May 2006	***Visiting Professor*** Department of Electronics, University of Calabria, Rende, Italy
July'00 – June'06	***Adjunct Professor*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta, Canada
August '98 - June'06	***Adjunct Scientist*** Telecommunications Research Laboratories, Edmonton, Canada
May 2002	***Visiting Professor*** Department of Electronics, University of Calabria, Rende, Italy
August 2001	***DAAD Fellow/Visiting Professor*** Institute of Microelectronic Circuits and Systems, University of Hanover, Hanover, Germany
July '97 – June '00	***Assistant Professor*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta, Canada
May '99 - July '99	***Visiting Professor*** Laboratory for Information Technology, University of Hanover, Hanover, Germany
Sep.'96 - Dec.'96	***Sessional Instructor*** Electrical and Computer Engineering Department, University of Alberta Edmonton, Alberta, Canada
Apr.'96 - June'96	***Workshop Instructor*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta -organized and instructed Cadence Analog Artist Schematic Design and Simulation Workshop for graduate students, faculty staff, and industrial participants
Jan.'97 - April 97	***Teaching Assistant*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta, Canada
May'93 - June 97	***Research Assistant*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta, Canada, and Rehabilitation Engineering, Glenrose Hospital, Edmonton
Sep.'92-Apr.'96	***Teaching Assistant*** Electrical and Computer Engineering Department, University of Alberta, Edmonton, Alberta, Canada

INDUSTRY WORK EXPERIENCE

1995-1996	***Contract VLSI Designer*** WideComp Group Inc., Mississauga, Ontario, Canada

Jul.'90-Dec.'91	***Senior VLSI Designer*** Microelectronics Structures Design Department, Institute of Informatics (formerly Institute of Computer Systems), Slovak Academy of Sciences, Bratislava, Slovakia, Europe
Jan.'87-Jun.'90	***Junior VLSI Designer*** Microelectronics Structures Design Department, Institute of Informatics (formerly Institute of Computer Systems), Slovak Academy of Sciences, Bratislava, Slovakia, Europe
summer '87	***Technical Assistant*** NARVA AG, consumer electronic products - testing division, Berlin, Germany
summer '86	***Technical Assistant*** NARVA AG, consumer electronic products - testing division, Berlin, Germany

PRESENT RESEARCH INTERESTS AND ACTIVITIES

* Low-Cost Long-term Reliability Methodologies for Complex System-on-Chips – project A: *Adaptable Design-for-Testability (DFT) Methods for Modern SoCs; –* project B: *Hypervector Methods to Improve Sustainability and Reliability of SoCs Systems*
* Low-Power High-Bandwidth Architectures for Parallel Processing – project: *Adaptable Resource and Energy Efficient Software/Hardware Architecture Co-Design*
* AI Innovation in Community-Driven Sectors - project: *Novel Machine Learning Techniques to Improve Personal Health*

1. ACTIVE GRANTS

06/2025-06/2026 **National Science Foundation (co-PI)** $1,054,019
Project: *Conference: CRA Summit on AI Undergraduate Education*

AWARDS

1. **Fulbright Distinguished Chair in Electrical Engineering Award**
2. **Best Paper Awards**
   A. Wim Vanderbauwhede, Anton Frolov, Sai Rahul Chalamalasetti and **Martin Margala**, "A Hybrid CPU-FPGA System for High Throughput (10Gb/s) Streaming Document Classification", in Proceedings of *4th International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies(HEART)*, 13-14 June, Edinburgh, Scotland, 2013. **Best Paper Award**
   B. Kemal Kulovic, **Martin Margala**, "Flexible VITAL Embedded Instruments For Built-In Test of AMS Power SOCs ", 21st *IEEE North Atlantic Test Workshop*, Boston, MA, 2012 **Jake Karrfalt Best Student Paper Award**
   C. **Martin Margala**, "Adaptable Architectures for Signal Processing Applications", in Proceedings of *First NASA/ESA Conference on Adaptive Hardware and Systems, (AHS 2006)*, 15-18 June 2006, pp. 247 – 254. **Best Paper Award**
   D. Zhao, Danella., Upadhyaya, S., and **Margala, Martin.**, "A New Distributed Test Control Architecture with Multihop Wireless Test Connectivity and Communication for Gigahertz System-on-Chips," in Proceedings of *IEEE North Atlantic Test Workshop*, Montauk, NY, pp. 90-93, 15-16 May 2003. **Jake Karrfalt Best Student Paper Award**
3. **Best Poster Award**
   A. Alaaddin Goktug Ayar, Sercan Aygun, M Hassan Najafi, **Martin Margala**, "Word2HyperVec: From Word Embeddings to Hypervectors for Hyperdimensional Computing", *ACM Great Lakes Symposium on VLSI*, Clearwater, FL, June 12-14, 2024.
   B. Abdullah Sahruri, **Martin Margala**, "High Fan-in Differential Capacitive-Threshold-Logic Implementation With an Offset-Compensated Comparator", "*16th Dallas Circuits and Systems Society (DCAS)*, April 2023, Dallas, TX.
4. **DAAD Fellowship** (Awarded by the German Academic Exchange Service), 2001
5. **Order Of An Engineer** – 2007.

PATENTS

1. Lin, R. and Margala, M., "Multiplier-Based Processor-in-Memory Architectures for Image and Graphics Processing", US patent 7,167,890 B2. 2007.

2. Diduck, Q. and Margala, M., "Frequency Modulation Based ADC", US Patent 7,425,915 granted September 2008.

3. Diduck, Q. and Margala, M., "Ballistic Deflection Transistor and Logic Circuits", US Patent 7,576,353 granted August 2009.

Education Summary – Materials Development, Advising and Mentoring

BOOKS and BOOK CHAPTERS

1. M. Guduri, R. Aluvalu, A. Krishna Dwivedi, **M. Margala**, *Advances in Intelligent Systems: Paradigms and Applications*, CRC Press, September 2025.

2. Minu R.I., Nagarajan G., **M. Margala**, Siva Shankar S., Logashanmugam E., *Exploring the Fusion of Quantum Computing and Machine Learning*, IGI Global Scientific Publishing, April 2025.

3. M. Guduri, **M. Margala**, C. Chakraborty, *Smart Devices for Medical 4.0 Technologies*, CRC Press, March 2025.

4. P. K. Sree, P. Chakrabarti, **M. Margala**, N SSSN Usha Devi, "Protein Structure Prediction Using Convolutional Neural Networks Augmented with Cellular Automata", in book titled *Computational Intelligence: Theory and Applications*, pp. 159-174, Wiley, November 2024.

5. Vanderbauwhede, W., Chalamalasetti, S., **Margala, M.,** "High Performance FPGA-Accelerated Real-Time Search", in book titled *High Performance Computing Using FPGAs,* Springer, May 2013.

6. Orailoglu, A., Ugurdag, H. F., Silveira, L.M., **Margala, M.**, Reis, R.(Eds.), *VLSI-SOC: At the Crossroads of Emerging Treds*, Springer, 2013.

7. Purohit, S., Chalamalasetti, S., **Margala, M.,** "Low Overhead Radiation Hardening Techniques for Embedded Architectures", in book titled *Embedded Systems: Hardware, Design, and Implementation*, Wiley, 2012.

8. Vanderbauwhede, W., Chalamalasetti, S., **Margala, M.,** "MORA: High-Level FPGA Programming Using a Many-core Framework", in book titled "*Multicore Technology: Architecture, Reconfiguration, and Modeling*", CRC Press, April 2012.

9. **Margala, M.**, "Low-Power Memory Circuits" in *VLSI Handbook 2nd ed*., Wai-Kai Chen ed., CRC Press, January 2010.

10. **Margala, M.**, "Low-Power Memory Circuits" in *VLSI Handbook*, Wai-Kai Chen ed., IEEE Press/CRC Press, January 2000.

POSTDOCTORAL AND VISTING FELLOWS

Manisha Guduri, Project: Smart Healthcare Devices and Methodologies Driven by AI, 04/2023-06/2025 (postdoctoral Fellow, now Assistant Professor at Lawrence Institute of Technology)

Jean-Francois Milithaller, Project: Ballistic Room Temperature Nanodevices, 03/2015-8/2017 (Postdoctoral Fellow, now Associate Chair and Associate Teaching Professor at the University of Massachusetts Lowell)

Oren Segal, Project: Ballistic Room Temperature Nanodevices, 05/2012-12/2012

(Visiting Fellow from the University of Haifa, Israel, now Associate Professor at Hofstra University)

Ignacio Iñiguez-de-la-Torre, Project: Ballistic Room Temperature Nanodevices, 09/2009-09/2010 (Postdoctoral Fellow, now Associate Professor at the University of Salamanca)

Mohamed Aly El-Hadedy, Project: Novel Security Algorithms and Their Implementation, 01/2010-01/2011 (Visiting Fellow from the Norwegian University of Science and Technology-NTNU, now Associate Professor at California Poly)

Marco Lanuzza, Project: Low-Power Reconfigurable Architectures, 06/2007-08/2008 (Visiting Fellow from the University of Calabria, now Associate Professor at the University of Calabria)

4. PRESENT GRADUATE STUDENTS

Student Name	Degree	Starting Date	Thesis Title	Prospectus Exam	Graduation
Rhonda Anderson	PhD	Jan-2023	Machine-Learning in IoT Systems	May 2026	May 2027
Ashok Polluvari	PhD	Jan-2024	Generative AI in Computer Vision Applications	December 2026	May 2027
Arman Ochi	PhD	Sept-2022	Novel Quantum Computing Architectures	May 2025	May 2026
Allaadin G. Ayar	PhD	Jan-2023	Sustainable Machine Learning Architecture Design Methodology	January 2025	May 2026
Abdullah Sahruri	PhD	Jan-2023	New Security Concepts in Circuit Design	March 2026	August 2026
Samantha Fowler	PhD	Sept-2024	Energy Efficient Reconfigurable Encryption and Compression Methods for Quantum Era	December 2026	December 2027
Madhu Nalluri	PhD	Sept-2024	Machine Learning for Internet-of-Medical Systems	December 2026	December 2027

5. PAST GRADUATE STUDENTS

Student Name	Degree	Graduated	Thesis Title	Employment
Boisy Pitre	***PhD***	***05/2025(ULL)***	***Energy Efficient Low-Cost Microarchitectures***	***Apple***
Leo Udeji	***PhD***	***05/2024(UML)***	***Neural Network Co-Design in FPGA-based Architectures***	***Faculty UML***
Shachi Khadilkar	***PhD***	***05/2024(UML)***	***New Open Source Design Tool Chain for Reconfigurable Systems***	***NXP, San Diego CA***
Sharath Patil	***PhD***	***05/2023(UML)***	***Novel LiDAR System for Autonomous Vehicles***	***Mathworks, MA***
Nazir Mohamed	***PhD***	***03/2020(UML)***	***Fabrication Techniques for 2-D Nanodevices in Graphene and GaN***	***MACOM, MA***
Philip Colangelo	***PhD***	***12/2019(UML)***	***Neural Network Optimizations for FPGA-based Accelerators***	***AMD, Boston MA***

Aydin Dirican	***PhD***	***01/2019(UML)***	***DFX for Power Management in SOCs***	***ON Semiconductor, NH***
Hieu (Kevin) Nguyen	***PhD***	***05/2018(UML)***	***Low-Power Design Methodology for High-Performance Serial Communication Links***	***Intel, AZ***
Huan Wang	***PhD***	***08/2018(UML)***	***THz Frequency Ballistic Travelling Wave Amplifiers***	***SkyWorks Inc.***
Cagatay Ozmen	***PhD***	***11/2017(UML)***	***Analog Signal Processing for Image Sensors***	***SkyWorks inc.***
Marthi Poorna	***PhD***	***08/2017(UML)***	***Room Temperature Ballistic Transistor Circuits***	***Intel Hudson, MA***
Nurretin Tan	MS	12/09/2016	Low-Power Frequency Synthesizers	N/A
William Cason	MS	11/30/2016	On the Development of a Standardized User Interface for FPGAs	BAE
Zhuo Qian	***PhD***	***08/2016(UML)***	***Low-Power Signal Processing on FPGAs***	***Philips Healthcare, WI***
Sheikh Rufsan Reza	MS	04/2016	Modeling of Ballistic Deflection Transistors and Circuits	N/A
Nasibeh Nasiri	***PhD***	***01/2016(UML)***	***Acceleration of Data Filtering in Heterogeneous Architectures***	***Intel, San Jose, CA***
Oren Segal	***PhD***	***12/2015(UML)***	***Software-Hardware CoDesign of Heterogeneous Architectures***	***Associate Professor, Hofstra University***
Sai Rahul Chalamalasetti	***PhD***	***12/2012(UML)***	***Reconfigurable Architectures for Data-Centric Applications***	***HP Labs, Palo Alto, CA***
Samed Maltabas	***PhD***	***08/2012(UML)***	DFX for MultiGigahertz Clocking Circuits	***Apple, Palo Alto, CA***
O. Kubilay Ekekon	***PhD***	***08/2012(UML)***	DFX for MultiGigabit I/O	***Intel, Hillsboro, OR***
Kemal Kulovic	***PhD***	***5/2012(UML)***	***New Embedded Test Methods for Systems-on-Chip***	***BOSE***
Kevin Rosario	MS	Sep-2011(UML)	Modeling of BDTs for Mixing Applications	N/A
Sohan Purohit	***PhD***	***1/2011(UML)***	***Adaptable Computing Architectures for Terabytes/s Processing***	***Broadcom, Austin, TX***
Vikas Kaushal	***PhD***	***4/2011(UML)***	***Terahertz Ballistic Devices***	***Samsung, Austin TX***
Essam Thabet	MS	Jul-2010	Reliability and Testing of GaN Circuits	Joel USA Inc., MA
Sai Rahul Chamalamasetti	MS	May-2009	Soft-Core Development for Efficient Reconfigurable Architectures	Started PhD at UML

Michael Wieckowski	***PhD***	***2007(UR)***	***Failure Analysis & Optoelectronic BIST for Semiconductor Optical Amplifiers***	***Joined Start-up in Charlotte, NC***
John Liobe	***PhD***	***2007(UR)***	***Novel Testing Methodology for Mixed-Mode Integrated Systems***	***UR Researcher***
Quentin Diduck	***PhD***	***2007(UR)***	***Design Methodologies for Ultra-fast Mixed-Signal Circuits***	***Start-up at Cornell U./CNF***
Sadeka Ali	***PhD***	***2006(UR)***	***Low-Power Methodology for Frequency Synthesizers***	***Intel, Santa Clara***
Marco S. Dragic	***PhD***	***2005(UAlb)***	***Current-Based Test in Deep Sub-Micron Environment***	***Mathworks***
Sandeep Patil	MS	2007	New Sense Amplifiers for Low Power SRAMs	N/a
Natalia Kazakova	MS	2003	Real-Time Volume Rendering System	BC Hydro
Brandon Jasionowski	MS	2004	A Processor-in-Memory for Image and Video Compression	Research Associates of Baltimore
Michelle Lay	MS	2004	A Processor-in-Memory for Image Compression using the 2-D DWT	US Patent and Trademark Office
Michael Wieckowski	MS	2004	A High-Speed Low-Power SRAM Architecture	Postdoctoral Fellow University of Michigan
Ronald Alonzo	MS	2005	Layout Techniques for High-speed High Arithmetic Circuits and Applications	n/a
Ivan Pecuh	MS	2000	Current Monitoring of Low-Voltage VLSI Circuits	Vittesse Corporation, Canada
Jeff Rysinski	MEng	2000	Analog-to-Digital Conversion Techniques for High Resolution Cameras	Micron Corporation
Omid Khanafshar	MEng	2000	Very High Resolution Scanning Camera	N/a
Anco Snip	MEng	2001	Using Computational RAM for Volume Visualization Applications	NXP Research, Holland
Li Chen	MEng	2000	An Investigation of Max. Power Efficiency of Pass-Transistor Circuits	Assistant Professor, South Dakota M&T University
Daniel Kwok	MEng	2000	An Investigation of Design Techniques for Max. Power Efficiency of Deep Sub-Micron CMOS Circuits	n/a
Hongfan Wang	MS	2000	Retargetable Arithmetic Architectures	Broadcom, Irvine, CA

n/a – not available

PROFESSIONAL AFFILIATIONS

- *IEEE Senior Member*
  - member of Solid-State Circuits Society
  - member of Computer Society
    - member of Test Technology Technical Council
  - member of Circuits and Systems Society
  - member of Communications Society
- *SPIE Senior Member*
- *ACM Senior Member*
- *AAAS and ASEE Member*
- *Member of Technical Workgroup (Test) for International Roadmap of Semiconductors*
- *Member of Semiconductor Research Consortium* (www.semitest.org)
- *Vicepresident of IEEE Electron Devices Society/IEEE Circuits And Systems Society, Rochester Chapter*, 2006
- *Vicepresident of IEEE Lafayette, 2022-2024*

SERVICE TO THE PROFESSIONAL COMMUNITY

- *CRA Panel on AI in Undergraduate Education,* CRA AI Summit, San Francisco July 2025.
- *Keynote Speaker* -2025 ACM/IEEE GLSVLSI, New Orleans, June 30-July 2nd.
- *Fulbright Program Reviewer*
- *National Science Foundation Panel Reviewer* – 2001-present(18 panels)
- *IEEE Photonics Society Summer School* – Course on Ballistic Structures, July 2010
- *Associate Editor* – Journal of Electronic Testing: Theory and Applications (2004-present)
  - Journal of Reconfigurable Computing (2011-2020)
  - Journal of Low Power Electronics and Applications (2018-present)
- *Technical Program Chair,* IEEE North Atlantic Test Workshop, 2012, 2013;
  2015 ACM GLSVLSI Symposium
- *Conference Chair, 2026 CIEC Conference, New Orleans, February 2026.*
  20th IEEE North Atlantic Test Workshop, 2011
  2016 ACM GLSVLSI Symposium
- *Vice-Conference Chair,* 18th, 19th IEEE North Atlantic Test Workshop, 2009, 2010;
  ACM International Conference on Highly Efficient Accelerators and Reconfigurable Technologies (HEART) 2015
- *Publications Chair,* 2013 IFIP/IEEE International Conference on VLSI-SOC
- *Local Arrangements Chair,* 17th IEEE North Atlantic Test Workshop, 2008, IEEE Nanotechnology Workshop, 2008
- *Vice-Program Chair,* IEEE North Atlantic Test Workshop, 2004
- *Publicity Chair,* IEEE International Workshop on Memory Technology, Design and Testing, 2004, IEEE North Atlantic Test Workshop, 2005, 2006; 21st International Symposium on Applied Reconfigurable Computing 2025.
- *technical program committee member:* ACM Design Automation Conference, IEEE International SOC Conference; Electronic Circuits and Systems Conference; IEEE Current and Defect Based Testing Workshop, IEEE Defect and Fault Tolerance in VLSI Systems, IEEE North

Atlantic Test Workshop, IEEE International Workshop on Memory Technology, Design and Testing, IEEE Southwest Symposium on Mixed-Signal Design, IEEE Midwest Symposium on Circuits and Systems, IEEE RF/Multi-GHz Test Workshop, IEEE Workshop on Test of Wireless Circuits and Systems, IFIP/IEEE International Conference on VLSI-SOC, IEEE Reconfigurable Computing Architectures and FPGAs Conference, Adaptive Hardware Systems Conference, International Symposium on Highly Efficient Accelerators and Reconfigurable Technologies (HEART2015).

- *active reviewer for major international technical journals(1996-present)*: IEEE Transactions on Computers, IEEE Transactions on Computer-Aided Design, IEEE Transactions on Circuits and Systems Part I., part II, IEEE Transactions on VLSI, IEEE Design & Test of Computers, IEEE Transactions on Instrumentation and Measurement, International Journal of Electronics, IET Circuits, Devices and Systems, IEE Electronics Letters. IEEE Signal Processing Letters, Journal of Real-Time Image Processing, International Journal of Circuit Theory and Applications.

- *active reviewer for international conferences and symposia(1996-present):* IEEE Symposium on Circuits and Systems, Design Automation Conference, IEEE VLSI Test Symposium, International Test Conference, International Conference in Central Europe on Computer Graphics, Visualization and Digital Interactive Media, IEEE SOC Conference, ECS (Electronics, Circuits and Systems) Conference, IEEE Industrial Electronics Conference, IEEE Canadian Conference on Electrical and Computer Engineering and countless others.

- presentations and seminars given at universities and companies in Canada, USA, and abroad (partial list from 1998-present):

- *USA:*Argonne National Lab, Florida Interational University, MITRE Corporation, Bedford, MA; University of Connecticut, University of Massachusetts Amherst, University of Rochester, Nanoelectronic Devices for Defense and Security Conference, Ft. Lauderdale, FL, University of Connecticut, University of Massachusetts Amherst, University of Vermont-Burlington, VT, Analog Devices-Wilmington, MA, University of North Carolina at Charlotte, University of Illinois at Chicago, Boston University, Yale University, SUNY at Buffalo, SUNY at Stony Brook, National Semiconductor, IBM Research-Yorktown Heights, RFMD-Greensboro;
- *Canada:* University of British Columbia, University of Waterloo, University of Western Ontario, Mitel Corporation, PMC Sierra Inc., National Research Council;
- *Europe:* Infineon-Munich, Germany; University of Karlsruhe, Germany; University of Calabria, Italy; University of Reggio, Italy; Institute of Theoretical Electrotechnik and Institute of Microelectronic Circuits and Systems, University of Hanover in Germany; Philips Semiconductors, Zurich, Switzerland.
