San José State University
Electrical Engineering Department

CURRICULUM VITAE

NAME
Sotoudeh Hamedi-Hagh

ACADEMIC RANK
Associate Professor

DATE OF ORIGINAL APPOINTMENT
Spring 2005

YEARS OF SERVICE (as of Spring 2013)
8 years

YEAR OF ADVANCEMENT IN RANK

Rank	Year	Institution and Department
Associate Professor	Fall 2011	Electrical Engineering at San Jose State University

TIME COMMITMENTS

Percentage of time committed to the program:	80%
Percentage of time available for research or scholarly activities:	20%

TEACHING RESPONSIBILITIES

- Undergraduate EE122 Electronics I, EE124 Electronics II, EE196X CMOS RF Design
- Graduate EE220 RFIC-I, EE223 Analog IC Design, EE296X RFIC-II

EDUCATION

Degree	Field	Institution	Year
• B.A.Sc	ECE	University of Science and Technology	1993
• M.A.Sc	ECE	University of Toronto	2003
• Ph.D.	ECE	University of Toronto	2004

OTHER RELATED EXPERIENCE

Description		Year
• Post Doctoral Fellowship	University of Toronto	2004

CONSULTING AND PATENTS

Description	Year
• US Patent, Wireless Phase Shifted Transmitters	2002

PROFESSIONAL REGISTRATION, LICENSING AND CERTIFICATION

State	Field

HONORS, GRANTS AND AWARDS

- Best paper award in the 15th IEEE International Symposium on Personal, Indoor *and Mobile Radio Communications, Barcelona, Spain, 2004*
- Best paper award in the 5th Micronet R&D Annual Workshop, Aylmer, Quebec (Micronet is a network of centers of excellence in microelectronics in Canada), 2001

MEMBERSHIP IN PROFESSIONAL SOCIETIES

IEEE, Solid-State Circuits Society 1998-2011

INSTITUTIONAL AND PROFESSIONAL SERVICE (last 5 years)

- Director of Nanoelectronics Research Center at SJSU 2005-present
- Faculty advisor of the IEEE and SOLES student Chapters at SJSU 2006-2010

PROFESSIONAL ACTIVITIES, DEVELOPMENT AND AFFILIATIONS (last 5 years)

- Technical Program Committee Member of the Korean International Conference on Advanced Materials (ICAM)

and International Conference on Information Science and Applications (ICISA)

- Committee member of the College of Engineering Analog and Mixed-Signal Design and Test center
- Technical reviewer for the IEEE Transactions on Microwave Theory and Techniques, IEEE Transactions on Electron Devices and IEEE Journal of Solid-State Circuits

SELECTED PUBLICATIONS

- S. Hamedi-Hagh, M.Y. Siddiqui, M. Singh and S. Ardalan, "A Low Voltage Digitally Controlled 4GHz Variable Gain Amplifier with Constant Return Loss," Journal of Selected Areas in Microelectronics, 2012.
- S. Hamedi-Hagh and D.-H. Park, "Applications of Nanowire Transistors for Driving Nanowire LEDs," Transactions on Electrical and Electronic Materials, Vol. 13, No. 2, pp. 73-77, 2012.
- S. Hamedi-Hagh, M. Tabesh, S. Oh, N.J. Park and D.-H. Park, "Design of UHF CMOS Front-Ends for Near Field Communications," Journal of Electrical Engineering and Technology, KIEE, Vol. 6, No. 6, pp. 817-823, 2011.
- Bindal, D. Wickramaratne and S. Hamedi-Hagh, "Implementation of a Direct Sequence Spread Spectrum Baseband Transmitter Using Silicon Nanowire Technology," Journal of Nanoelectronics and Optoelectronics, Vol. 5, No. 1, pp. 1-12, 2010.
- Bindal, T. Ogura, N. Ogura and S. Hamedi-Hagh, "Silicon Nanowire Transistors for Implementing an Field Programmable Gate Array Architecture with Scan Chain," *Journal of Nanoelectronics and Optoelectronics*, Vol. 4, pp. 342–352, 2009.
- S. Hamedi-Hagh, J.C. Chung, S. Oh, N.J. Park and D.H. Park, "Design of a High Performance Patch Antenna for GPS Communication Systems," *Journal of Electrical Engineering and Technology, KIEE*, Vol. 4, No. 2, pp. 282-286, 2009.
- S. Hamedi-Hagh and A. Bindal, "Design and Characterization of the Next Generation Nanowire Amplifiers," *Journal of VLSI Design*, Article ID 190315, 2008.
- J.C. Chung and S. Hamedi-Hagh, "Design of PCB Matching-Inductors and Antennas for Single-Chip Communication Systems," *International Journal of Microwave Science and Technology*, Article ID 287627, 2008.
- Hamedi-Hagh and A. Bindal, "Characterization of Nanowire CMOS Amplifiers Using Fully Depleted Surrounding Gate Transistors," *Journal of Nanoelectronics and Optoelectronics*, Vol. 3, No. 3, pp. 281-288, 2008.
- S. Hamedi-Hagh, S. Oh, A. Bindal and D.H. Park, "Design of Next Generation Amplifiers Using Nanowire FETs," *Journal of Electrical Engineering and Technology, KIEE*, Vol. 3, No. 4, pp. 566-570, 2008.
- S. Hamedi-Hagh and A. Bindal, "SPICE Modeling of Silicon NanoWire Field Effect Transistors for High Speed Analog Integrated Circuits," *IEEE Transactions on* Sotoudeh Hamedi-Hagh page 3/6 *Nanotechnology*, Vol. 7, pp. 766-775, 2008.
- Bindal, S. Hamedi-Hagh and T. Ogura, "Silicon NanoWire Technology for Applications in the Field Programmable Gate Array Architectures," *Journal of Nanoelectronics and Optoelectronics*, Vol. 3, No. 2, pp. 1-9, 2008.
- Bindal and S. Hamedi-Hagh, "Silicon NanoWire Transistors and Their Applications for the Future of VLSI: An Exploratory Design Study of a 16×16 SRAM," *Journal of Nanoelectronics and Optoelectronics*, Vol. 2, pp. 294-303, 2007.
- Bindal, A. Naresh, P. Yuan, K. K. Nguyen and S. Hamedi-Hagh, "The Design of Dual Work Function CMOS Transistors and Circuits Using Silicon NanoWire Technology", *IEEE Transactions on Nanotechnology*, Vol. 6, pp. 291-302, 2007.
- Bindal and S. Hamedi-Hagh, "The Design of a New Spiking Neuron Using Silicon NanoWire Technology", *Journal of Nanotechnology (Institute of Physics)*, Vol. 18, pp. 1-12, 2007.
- Bindal and S. Hamedi-Hagh, "An Exploratory Study on Power Efficient Silicon NanoWire Dynamic NMOSFET/PMESFET Logic", *IEE Proceedings in Science, Measurement and Technology*, Vol. 1, pp. 121-130, 2007.
- Bindal and S. Hamedi-Hagh, "Static NMOS Circuits Using Silicon NanoWire Technology for Crossbar Architectures", *Journal of Semiconductor, Science and Technology (Institute of Physics)*, Vol. 22, pp. 54-64, 2007.
- Bindal and S. Hamedi-Hagh, "The Impact of Silicon NanoWire Technology on the Design of Single Work Function CMOS Transistors and Circuits", *Journal of Nanotechnology (Institute of Physics)*, Vol. 17, pp. 4340-4351, 2006.