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School of Electrical and Computer Engineering  
Georgia Institute of Technology  
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## Professional Education

<u>School</u>	<u>Major</u>	<u>Degree</u>	<u>Year</u>
Arizona State University	Electrical Engineering	B.S.	1991
Arizona State University	Electrical Engineering	M.S.	1991
California Institute of Technology	Computation and Neural Systems	Ph.D.	1997

## Professional Appointments

<u>Location</u>	<u>Position</u>	<u>Years</u>
Georgia Institute of Technology	Full Professor	2011-present
Mavric Semiconductor	Chair of Board, Cofounder, CSO	2012-2015
Neuromorfix	President, BoD, Cofounder	2007-2011
Georgia Institute of Technology	Associate Professor	2003-2011
GTronix	CSO, BoD, Cofounder	2003-2010
Georgia Institute of Technology	Assistant Professor	1997-2003
California Institute of Technology	Post-doctorate Fellow	1997
California Institute of Technology	Graduate Assistant	1992-1997
Arizona State University	Graduate Assistant	1989-1992

## Relevant Publications

- J. Hasler and B. Marr, "Finding a roadmap to achieve large neuromorphic hardware systems," *Frontiers in Neuromorphic Engineering*, September 2013. pp. 1-29. doi:10.3389/fnins.2013.00118.
- S. George, S. Kim, S. Shah, J. Hasler, M. Collins, F. Adil, R. Wunderlich, S. Nease, and S. Ramakrishnan "A Programmable and Configurable Mixed-Mode FPAA SOC," *IEEE Transactions on VLSI*, May 2016.
- S. Kim, J. Hasler, and S. George, "Integrated Floating-Gate Programming Environment for System-Level ICs," *Transactions on VLSI*, May 2016.
- M. Collins, J. Hasler, and S. George, "An Open-Source Toolset Enabling Analog--Digital Software Codesign," *Journal of Low Power Electronics Applications*, January 2016.
- S. George, J. Hasler, S. Koziol, S. Nease, and S. Ramakrishnan, "Low power dendritic computation for wordspotting," *Journal of Low Power Electronics Applications*, vol. 3, 2013, 73-98.
- M. Kucic, A. Low, P. Hasler, and J. Neff, "A Programmable Continuous-time Floating-Gate Fourier Processor," *IEEE Transactions on Circuits and Systems II*, Jan. 2001.
- E. Farquhar and P. Hasler, "A Bio-Physically Inspired Silicon Neuron," *IEEE Transactions on Circuits and Systems I*, May 2005.
- R. Robucci, J. Gray, Leung Kin Chiu, J. Romberg, and P. Hasler, "Compressive Sensing on a CMOS Separable-Transform Image Sensor," *IEEE proceedings*, 2010.
- S. Ramakrishnan, P. E. Hasler, C. Gordon, "Floating Gate Synapses with Spike Time Dependent Plasticity," *IEEE Transactions on Bio Circuits and Systems*, May 2012.
- S. Nease, S. George, P. Hasler, S. Koziol, and S. Brink, "Modeling and Implementation of Voltage-Mode CMOS Dendrites on a Reconfigurable Analog Platform," *IEEE Transactions on Bio Circuits and Systems*, 2012.

Over 12 book chapters, 95 journal papers, and 250 refereed conference papers in print or in press. Over 25 U.S. patent applications filed, and over 30 active disclosures.

## Synergistic Activities

- Launched and Co-founded GTronix in 2002, based upon previous NSF research, \$13M raised, based in Fremont,

CA. Acquired by National Semiconductor in June 2010.

- Launched and Co-founded Neuromorfix (Nfx) in 2007, based in Atlanta, GA to commercialize programmable and configurable analog / mixed signal approaches. Launched and Co-founded Mavric Semiconductor in 2012, based in Atlanta GA to commercialize programmable, configurable, and neuromorphically inspired integrated circuits for wide utilization.
- Member of DSRC, 2007-2009.
- Board member of NSF funded Institute of Neural Engineering (INE), and coordinator for Telluride Neuromorphic Engineering Workshop (also funded through NSF). Organized or co-organized workshops on Floating-Gate circuits at the NSF Neuromorphic Engineering Workshop, Telluride, CO (1997, 1998, 1999, 2000, 2002, 2004 - 2011). Part of organizing committee since 2004.
- Guest editor of IEEE Circuits and Systems Journal, "Floating-gate circuits and systems," January 2001.

## Selected Honors and Awards

- ONR Young Investigator Award, 2002
- NSF CAREER Award, 2001
- Outstanding Graduate Student Mentor Award, GT, 2011
- Paul Rapphorst best paper award, IEEE Electron Devices Society, 1997. Best Paper at CICC 2005, Best Sensor Track paper at ISCAS 2005, Best paper award at Ultrasound Symposium, 2006, Best Demonstration paper award, ISCAS 2010, Best paper award at SCI 2001, 2<sup>nd</sup> Place, Student Paper Award, IEEE Sensors Conference