Some Professional Highlights: 2009-present

Steven Nowick (12/16/14)

Below is a list of some highlight in the last 5 years, including grants, publications, awards, etc. It is not a complete list -- see CV and research statement for more items and details.

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1. Distinguished Teaching Award

Columbia SEAS Alumni Distinguished Faculty Teaching Award (2011):
Best teacher award in Columbia Engineering School (2 per year, out of approximately 170 faculty). Selected by students, with consultation of alumni.

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2. IEEE Fellow (2009): Circuits and Systems Society (CAS)

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3. Chair, Computer Engineering Program (Columbia)

Co-founded program (1994), jointly run by CS and EE departments, and served as chair from 2008-2013 (re-elected 2011 for 2nd term). During this period, the BS program grew from 23 to 57 majors, and the MS applications increased from 76 to 285 (Fall admission), with 64 total current MS students enrolled.

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4. Major Grants

Awarded two competitive medium-scale NSF awards:

"*Power-Adaptive, Event-Driven Data Conversion and Signal Processing Using Asynchronous Digital Techniques.*" Total: $1,062,605, PI: Yannis Tsividis (EE, Columbia), co-PI: Steven Nowick (CS, Columbia).

topic area: continuous-time DSP's

"*Design and Tools for Easy-to-Program Massively Parallel On-Chip Systems: Deriving Scalability Through Asynchrony.*" Total: $921,686, PI: Steven Nowick (CS, Columbia), co-PI: Uzi Vishkin (ECE, U. Maryland).

topic area: asynchronous/GALS interconnection networks for high-performance chip multiprocessors

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5. Professional Society and Agency Activities

(i) *Invited Participant (August 2014),* ***NSF/DARPA/DOE/NASA Workshop on System-on-Chip Design for High-Performance Computing***

Invited to national study group with only 32 total participants (government, academia, industry), including only 8 invited academics, on the future of designing cost-effective high-performance computing systems for both Big Data and consumer applications. It is organized by a cross-agency team from NSF, DOE, DARPA, NASA, Sandia Laboratories and Lawrence Berkeley Laboratories (see https://sites.google.com/a/lbl.gov/socforhpc/).

(ii) *Selection Committee Member (2014),* ***ACM/IEEE "A. Richard Newton Technical Impact Award in Electronic Design Automation"***

(iii) *Selection Committee Chair (2012-2013),* ***ACM/SIGDA "Outstanding PhD Dissertation in EDA Award"***

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6. Conference Activities

(i) *Topic Area Co-Chair (2015):* **ACM/IEEE DATE Conference, Program Committee,** "Network on Chip" area

(ii) *Subcommittee Chair (2011-2013):* **ACM/IEEE DAC Conference, Program Committee,** "High-Level and Logic Synthesis, Circuit-Level Optimization, and FPGA" area

(iii) *Topic Area Chair (2009-10)/Co-Chair (2008):* **ACM/IEEE DATE Conference, Program Committee,** "Logic and Technology-Dependent Synthesis for Deep-Submicron Circuits" area

(iv) *Selection Committee Member (2014):* **William J. McCalla Best Paper Award: ACM/IEEE ICCAD Conference**

(v) *Selection Committee Member (2010)*: **Best Paper Award: ACM/IEEE DAC Conference**

Other: PC Member for 7 conferences/workshops: DAC, DATE, NOCS, Async, IWLS, INA-OCMC, FMGALS

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7. Journal Activities

(i) *Associate Editor (2015-2016):* **IEEE Transactions on VLSI Systems**

(ii) *Associate Editor (2010-2015):* **ACM Journal on Emerging Technologies in Computing Systems** (invited for two 3-year terms)

(iii) *Associate Editor (2003-2011):* **IEEE Transactions on CAD** (invited for four 2-year terms)

(iv) *Guest Co-Editor,* **ACM Journal on Emerging Technologies in Computing Systems***, special issue on asynchrony in system design,* vol. 7:4, December 2011.

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8. Paper Awards

(i) ***Best Paper Award (logic & circuit design track)*** *(2012):* **IEEE ICCD Conference**
C. Vezyrtzis, Y. Tsividis and S.M. Nowick, "*Designing Pipelined Delay Lines with Dynamically-Adaptive Granularity for Low-Energy Applications*."

(ii) ***Best Paper Finalist*** *(2013):* **ACM/IEEE DATE Conference**
A. Ghiribaldi, D. Bertozzi and S.M. Nowick, "*A Transition-Signaling Bundled Data NoC Switch Architecture for Cost-Effective GALS Multicore Systems.*"

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9. Invited Talks

16 talks at leading institutions from 2009-2014: CMU, Stanford, EPFL, Universita di Bologna, Georgia Tech, Duke University, CEA-LETI, University of Massachusetts (Amherst), University of Toronto, IBM T.J. Watson, Texas A&M (*twice*), Portland State, AMD Research (*twice*), University of Texas (Austin). These include an invited talk to the **Computer Engineering Eminent Scholar Seminar series** at Texas A&M.
