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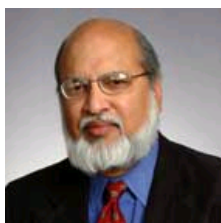
ARVIND

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Last Update: October 4, 2012
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BIOGRAPHY

Arvind is the Johnson Professor of Computer Science and Engineering at MIT. Arvind's group, in collaboration with Motorola, built the Monsoon dataflow machines and its associated software in the late eighties. In 2000, Arvind started Sandburst which was sold to Broadcom in 2006. In 2003, Arvind co-founded Bluespec Inc., an EDA company to produce a set of tools for high-level synthesis. In 2001, Dr. R. S. Nikhil and Arvind published the book "Implicit parallel programming in pH". Arvind's current research focus is on enabling rapid development of embedded systems.

Arvind is a Fellow of IEEE and ACM, and a member of the National Academy of Engineering and the American Academy of Arts and Sciences

PUBLICATIONS

Michal Karczmarek and Arvind, "Synthesis from Multi-Cycle Atomic Actions as a Solution to the Timing Closure Problem", *ICCAD 2008*, Santa Clara, CA, November 2008.

Muralidaran Vijayaraghavan, and Arvind, "Bounded Dataflow Networks and Latency-Insensitive Circuits", *MEMOCODE* 7, MIT, Cambridge, MA July 13-15 2009.

Abhinav Agarwal, Man Cheuk Ng, and Arvind "A Comparative Evaluation of High-Level Hardware Synthesis Using Reed-Solomon Decoder", IEEE ESL Journal, Vol 2, Issue 3, September 2010.

Man Cheuk Ng, Kermin Elliott Fleming, Mythili Vutukuru, Samuel Gross, Arvind, and Hari Balakrishnan, "Layering for Cross-Layer Wireless Protocols", *Architectures for Networking and Communications Systems (ANCS 2010)*, San Diego, CA, October 25-26, 2010. *(Best paper award)*

Nirav Dave, Michael Katelman, Myron King, Arvind, and Jose Meseguer, "Verification of Microarchitectural Refinements in Rule-based Systems", *MEMOCODE 9*, Cambridge, UK, July 11-13, 2011

AWARDS

IEEE Computer Society: Harry Goode Memorial Award (2012)

American Academy of Arts and Sciences: Fellow (2012)

ACM/IEEE: Best Paper (2011)

National Academy of Engineering: Member (2008)

University of Minnesota: Outstanding Achievement Award (2008)

Association for Computing Machinery: Fellow (2006)

University of Minnesota: Distinguished Alumni Award (2001)

I.I.T. Kanpur: Distinguished Alumnus Award (1999)

Institute of Electrical and Electronics Engineers: Charles Babbage Outstanding Scientist Award (1994)

Institute of Electrical and Electronics Engineers: Fellow (1994)

Massachusetts
Institute of
Technology