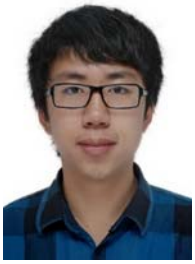
Current Graduate Students

Mahdi Aghadjani received the B.S. and M.S. degrees in electrical engineering from Iran University of Science and Technology and University of Tehran, respectively. He is currently working toward the Ph.D. degree as a Graduate Student Research Assistant in the Electrical Engineering and Computer Science Department. His current research interests include designing optical and THz devices.



Nan Zheng received the B.E. degree in information engineering from Shanghai Jiao Tong University, Shanghai, China, in 2011 with "Shanghai Outstanding Graduate" honor. He is currently pursuing Ph.D. degree at University of Michigan, Ann Arbor.

His research interests are RF/microwave/analog circuit and system design.

Mahmood Barangi received the B.S. degree in electrical engineering in 2009 from Sharif University of Technology, Tehran, Iran. He received his M.S. degree in 2011 in electrical engineering from the University of Michigan, Ann Arbor, MI, where he is currently pursuing his Ph.D. degree.

He is currently a Graduate Student Research Assistant with the Electrical Engineering and Computer Science Department at the University of Michigan. His research interests include low power digital and mixed signal circuit design, low power data converters with a specialty on Successive Approximation Register (SAR) Analog to Digital Converters (ADC), low power robust SRAM design, and Spin Transfer Torque (STT) based logic and memory design.

Jaeyoung Kim received the B.S. degree in electrical and electronic engineering from Yonsei University, Seoul, Korea, in 2005, where he graduated at the top (summa cum laude) within 3 years. He received the M.S. degree in electrical engineering from the University of Michigan, Ann Arbor in 2011, where he is currently working toward the Ph.D. degree.

His research interests include asynchronous circuit design, subthreshold circuit design, and ultra-low power VLSI circuits. He is a recipient of Samsung Scholarship for his Doctoral Study.

Zhao Xu received the B.S. degree in electronics engineering from Tsinghua University, Beijing, China in 2006 and the M.S. degree in electrical engineering from the University of Michigan, Ann Arbor, in 2008, where he is currently working toward the Ph.D. degree.

He is a Graduate Student Research Assistant with the Electrical Engineering and Computer Science Department, University of Michigan. His current research interests include the modeling, simulation, and design of THz spoof plasmonic structures and components as well as their applications in sensing, imaging and THz circuitries.

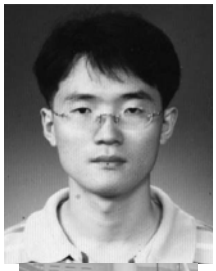
Yalcin Yilmaz received the B.S and M.S. degrees in Electrical Engineering in 2009 and 2011 from the University of Michigan, Ann Arbor where he is currently working towards the Ph.D. degree.

He is a Graduate Student Research Assistant with the Electrical Engineering and Computer Science Department, University of Michigan. His current research interests include the modeling, simulation, low power digital and analog circuit designs for emerging technologies including spin based devices, resonant tunneling diodes and memristors

Previous Ph.D. Students

Idongesit E. Ebong received the B.S. and M.S. degrees in 2006 from Carnegie Mellon University, Pittsburgh, PA in Electrical and Computer Engineering, and the Ph.D. degree in 2012 from University of Michigan, Ann Arbor, MI in Electrical and Computer Engineering.

He is currently a Postdoctoral Research Fellow in Electrical and Computer Engineering department at the University of Michigan. His research interests include digital/analog integrated circuit design, self-repair circuits, and bio-inspired circuitry utilizing different nanodevices including resonant tunneling diodes and memristors in low power applications.



Kyungjun Song received the Ph.D. from the University of Michigan, Ann Arbor, in 2010. He worked as Postdoc with the Department of Electrical Engineering and Computer Science, University of Michigan. His research interests include modeling, simulation, and design of plasmonic nanoarchitecture. He is now working with the Dept. of Nature-inspired Nano-converge System, Korea Institute of Machinery and Materials (e-mail: songk@kimm.re.kr)

Woo Hyung Lee received the B.S. degree (summa cum laude) in electronic materials engineering from the Kwangwoon University, Seoul, Korea, in 1999, the M.S. degree in materials science engineering from the Kwangju Institute of Science and Technology, Kwangju, Korea, in 2001, and the Ph.D. degree in electrical engineering and computer science from the University of Michigan in 2008. He is currently a senior research scientist at Intel.

BaohuaWang received the M.S. degree in computer science from Tsinghua University, Beijing, China and the Ph.D. degree in computer science and engineering at the University of Michigan, Ann Arbor. His research interests include physical design algorithms, circuit simulation and optimization, and nanometer circuit design issues. He is an engineer at VMware.

Qinwei Xu received the B.S. and M.S. degrees in electrical engineering from Shandong University, Shandong, China, in 1991 and 1994, respectively, and the Ph.D. degree in computer science and engineering at The University of Michigan, Ann Arbor, in 2006. His research interests include interconnect modeling, circuit simulation, and VLSI physical design. He is currently at Cadence Design Systems.

Li Ding received the B.S. degree in physics from Peking University, Beijing, China, and the M.S. and Ph.D. degrees in electrical engineering and computer science from the University of Michigan, Ann Arbor, in 1997, 2000, and 2004, respectively. His research interests include VLSI circuits and computer-aided design. He is currently at Synopsis.

Alejandro F. González received the BE degree in electrical engineering from the Instituto Tecnológico y de Estudios Superiores de Occidente, Guadalajara, Mexico, in 1993, and the MSE and Ph.D. degrees in electrical engineering from the University of Michigan, Ann Arbor, in 1995 and 2001, respectively. He is currently at IDT.

Shriram Kulkarni received the B.E. degree in electronics and communication engineering from the Karnataka Regional Engineering College, India, and the M.S. and Ph.D. degrees in electrical engineering from the University of Michigan, Ann Arbor. His research interests include design and optimization of ultrafast circuits and VLSI physical design automation. He is currently at IDT.

Mayukh Bhattacharya received the B.Tech. degree in electronics and electrical communication engineering from the Indian Institute of Technology, Kharagpur, in 1992, the M.S. degree in electrical engineering from Virginia Polytechnic Institute and State University, Blacksburg, in 1994, and the Ph.D. degree in Electrical Engineering and Computer Science from University of Michigan, Ann Arbor in 1999. His research interests include VLSI circuit simulation, optimization, synthesis for low power, and VLSI physical design. He is currently at Avant.

Kanad Chakraborty received the B.Tech. degree in computer science and engineering from the Indian Institute of Technology, Kharagpur, in 1989, the M.S. degree in computer and information science from Syracuse University in 1992, and the Ph.D. degree in computer science and engineering from the University of Michigan, Ann Arbor, in 1997. He is currently at Lattice Semiconductor.

S. Mohan received the B.Tech degree from the Indian Institute of Technology, Madras in 1985 and the M.S. and Ph.D. degrees in computer science and engineering from the University of Michigan, Ann Arbor, in 1991 and 1994, respectively. He is currently at Xilinx.

Venkateswaran Ramachandran received the B.Tech. degree in computer science from the Indian Institute of Technology, Bombay, in 1988, and the M.S. and Ph.D. degrees in computer science and engineering from the University of Michigan, Ann Arbor, in 1992 and 1994. He is currently at Google.

H. Esbensen. "Application of Genetic Algorithms for Cell Placement and Routing Problems," 1994. Currently at Avant! Fremont, California.

Khushro Shahookar received the B.Sc. degree in electrical engineering from the University of Engineering and Technology, Lahore, Pakistan in 1986, and the M.S. and Ph.D. degrees in electrical engineering from the University of Michigan, Ann Arbor in 1989 and 1994, respectively. He is currently at Opulence Systems.

Jih-Shyr Yih did his undergraduate study in Computer Science and Information Engineering at National Taiwan University. He received his Ph.D. degree in Computer Science and Engineering from University of Michigan, Ann Arbor in 1990. He is currently working on services transformation initiatives for IBM.

Previous Masters Students

B. Brighton, *Pseudo-Random Testing for Embedded Memories*
K. Quasim, *Analog Circuit Testing*
J. Kapson, *Parallel CAD Architecture*
D. Berryman, *Parallel Processing for VLSI Routing*
M. Smith, *Self-Repairable Memory Using Digital Neural Circuit*
E. Chan, *RTD-based Multi-valued Circuit Design*
A. Arunachalam, *Fine-Grained Parallel Routing*
A. Gupta, *Self-Repairable ROM Generator*
J. Xiong, *Quantum MOS Circuit Design*
G. Mittal, *Switching Noise Analysis in Embedded Memories*
V. Warraich, *Web-based Applets Design for Digital Logic*
M. Kumshikar, *Amorphous TFT-based Driver Logic Design for AMLCD Panel*
G. Shankar, *Amorphous TFT-based Operational Amplifier Design for AMLCD Panel*
H. Chan, *Macro-cell Placement Using Genetic Algorithm*
L. Ding, *Noises in Deep Sub-micron VLSI Chips*

H. Zhang, *Ultra-fast RTD-based Circuit Design*
S.R. Li, *RTD-based Cellular Nonlinear Networks*
D. Shi, *Quantum Dot Based Image Processing*
Manoj Rajagopalan, *Modeling of Resonant Tunneling Diodes*
C. Ting, *Modeling of Ionic Current through Memristors*
J. Qian, *Green Function based Thermal Modeling*
H. Liu, *Straintronics SRAM Design*

Visiting Scholars

Dr. Ueymura, NEC, Japan
Prof. Choi, Hanyang University, South Korea
Dr. H. Esbensen, Aarhus University, Denmark
Dr. Q. W. Xu, China
Dr. J. P. Sun, JT University, China
Mr. P. Kelly, Ulster University, Ireland
Mr. T. Glotzner, Germany

Shukai Duan received the B.Sc. degree in applied physics and the M.S. degree in condensed matter physics from Southwest University, Chongqing, China, in 1996 and 2003, respectively, and the Ph.D. degree in computer application technology from Chongqing University, Chongqing. He is the Associate Dean and Professor with the School of Physical Science and Technology, School of Electronics and Information Engineering, Southwest University.