Li Xu

EECS, University of Michigan, Ann Arbor

Email: lxummad@umich.edu

Education University of Michigan, Ann Arbor

Ph.D. Pre-candidate in Electrical and Computer Engineering

Aug. 2016-Present

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Advisor: Professor Dennis Sylvester

Northeastern University, Boston

M.S. in Electrical and Computer Engineering

Sept. 2013-May 2016

Thesis Topic: Low-power RF Circuit Design and Built-In Test Current Generation Techniques for

Wireless Chips in Emerging Sensing Applications.

Advisor: Professor Marvin Onabajo

Tongji University, Shanghai, P.R. China

B.Eng. Degree in Automation

Sept. 2005-July 2009

Thesis: Research on Inventory Management of Spare Parts (Operations Research).

Industrial **Experience**

Linear Technology, Colorado Springs

Design Intern

June 2015-Aug. 2015

DC-DC chip evaluation, ringing issue analysis and solution prototyping.

Ricoh Electronic Devices Shanghai Co., Ltd IC Designer July 2009-Aug. 2011

Responsible for LDO and DC-DC blocks design including spec evaluation, circuit design and verification with Cadence, programming of Ocean scripts, layout, post-layout verification, report and datasheet creation, chip evaluation, and teaching new engineers.

Research

Michigan Integrated Circuit Laboratory

Aug. 2016-Present

Analog and Mixed-Signal Circuit Design for Emerging Applications

AMSIC Research Laboratory, Northeastern University

Sept. 2013- May 2016

- 1. Linearization Technique of Sub-1V and Sub-mW RF Front End
- 2. On-Chip Input Impedance Self-Calibration of EEG Analog Front-End

Publications

- [1] L. Xu, C.-H. Chang, and M. Onabajo, "A 0.77mW 2.4GHz RF Front-End with -4.5dBm In-Band IIP3 Through Inherent Filtering", IEEE Microwave and Wireless Components Letters, May 2016.
- [2] C.-H. Chang, L. Xu, and M. Onabajo, "Instrumentation Amplifier and Current Injection Circuit Design for Input Impedance Boosting in Biopotential and Bioimpedance Measurements", Analog Integrated Circuits and Signal Processing, Feb. 2016.
- [3] L. Xu, K. Wang, C.-H. Chang, and M. Onabajo, "Inductorless Linearization of Low-Power Active Mixers", in Proc. IEEE International Symposium on Circuit and Systems (ISCAS), pp. 2213-2216, May 2015.
- [4] L. Xu and M. Onabajo, "A Low-Power Temperature-Compensated Relaxation Oscillator for Built-in Test Signal Generation," in Proc. IEEE International Midwest Symposium on Circuits and Systems (MWSCAS), Aug. 2015.
- [5] M. Onabajo, C.-H. Chang, L. Xu, "Subthreshold RF Circuit Design for Short-Range Wireless Communication Applications," CMOS Emerging Technologies Workshop, Montreal, Canada, May 25-27, 2016.

Publications (Cont.)

- [6] C.-H. Chang, L. Xu, and M. Onabajo, "A low-power RF receiver front-end chip designed with methods to reduce third-order intermodulation distortion," in *Proc. IEEE Dallas Circuits and Systems Conference (DCAS)*, Oct. 2016.
- [7] S. A. Zahrai, L. Xu, C.-H. Chang, K. Wang, I. Farah, and M. Onabajo, "On-chip digital calibration for automatic input impedance boosting during biopotential measurements," in *Proc. IEEE Intl. Midwest Symp. on Circuits and Systems (MWSCAS)*, Aug. 2015.
- [8] L. Xu, J. Feng, Y. Ni, and M. Onabajo, "Test Signal Generation for the Calibration of Analog Front-End Circuits in Biopotential Measurement Applications," in *Proc. IEEE International Midwest Symposium on Circuits and Systems (MWSCAS)*, pp. 949-952, Aug. 2014.

Review Experience

Reviewer, International Journal of Circuit Theory and Applications (IJCTA), IEEE Transactions on Circuit and Systems Part II (TCAS II), IEEE International Symposium on Circuit and Systems (ISCAS) 2016, IEEE Midwest Symposium on Circuits and Systems (MWSCAS) 2014, and Great Lakes Symposium on VLSI Systems (GLSVLSI) 2015.

Hobbies

Soccer Left Back on soccer team of School of Electronics and Information at Tongji University

Movie 111 enjoyed /IMDb Top 250