Adam Watkins

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Education

Ph.D. Electrical & Computer Engineering, Southern Illinois University Carbondale, 2016 GPA: 3.769/4.0.

M.S. Electrical & Computer Engineering, Southern Illinois University Carbondale, 2012 GPA: 4.0/4.0.

B.S. Computer Engineering, Southern Illinois University Carbondale, 2010 GPA: 3.63/4.0.

Employment

Postdoctoral Research Associate, Los Alamos National Laboratory, December 2016–Present

Graduate Research Assistant, Los Alamos National Laboratory, May 2016–December 2016.

Doctorate Electrical Engineering Intern, Rockwell Collins, June 2015–August 2015.

Instructor, Southern Illinois University Carbondale, June 2011-May 2016

Research Assistant, Southern Illinois University Carbondale, August 2010–November 2016.

Publications

Peer Reviewed

A. Watkins and S. Tragoudas, *Radiation hardened latch designs for multi-node upsets*, IEEE Transactions on Emerging Topics in Computing *Under Review*

A. Watkins and S. Tragoudas, *METS: A multiple event transient simulator*, 2016 IEEE International Symposium on Circuits and Systems (ISCAS), Baltimore, MD, 2017. *To Appear*

A. Watkins and S. Tragoudas, *A highly robust double node upset tolerant latch*, 2016 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT), Storrs, CT, 2016.

A. Watkins and S. Tragoudas, *An enhanced analytical electrical masking model for multiple event transients* In Proceedings of the 26th edition on Great Lakes Symposium on VLSI (GLSVLSI '16). ACM, New York, NY, 2016, pp. 369-372.

A. Watkins, V. Mudhireddy, H. Wang, and S. Tragoudas, *Adaptive compressive sensing for low power wireless sensors*, In Proceedings of the 24th edition of the great lakes symposium on VLSI (GLSVLSI '14). ACM, New York, NY, 2014, pp. 99-104.

A. Watkins and S. Tragoudas, *Transient pulse propagation using the Weibull distribution function*, 2012 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT), Austin, TX, 2012, pp. 109-114.

In Preparation

A. Watkins and S. Tragoudas, *Fast and accurate simulation of multiple event transients*

Not Peer Reviewed

A. Watkins, *Analysis and mitigation of multiple radiation induced errors in modern circuits*, Ph.d. Dissertation

A. Watkins, *Radiation induced transient pulse propagation using the Weibull distribution function*, Master's Thesis

Patents

A. Watkins and S. Tragoudas, *A highly robust double node upset tolerant latch*, Provisional Patent

Competitive Honors/Awards

Best Student Paper Award, DFT 2016

ISR–3 Spot Award, Los Alamos National Laboratory, 2016

Outstanding Poster Award, Los Alamos National Laboratory Student Symposium, 2016

Heart of Illinois Waste Water Operators Scholarship, 2008, $500

SIUC Dean Scholarship, Southern Illinois University Carbondale, 2006, $6000

SIUC College of Engineering Scholarship, Southern Illinois University Carbondale, 2006, $1000

Professional Activities

Reviewer: IOLTS 2017, IOLTS 2016, GLSVLSI 2016, IEEE Transactions on Emerging Technologies in Computing 2016, ISQED 2016, GLSVLSI 2015, ISQED 2015, VLSI Design 2014, IOLTS 2012

IEEE, Student Member, 2015-Present

Teaching Experience

Fall 2015–Spring 2016, Instructor, ECE 296 Software Tools for Engineers

Summer 2011–Fall 2015, Instructor, ECE 235 Electric Circuits

Fall 2010–Spring 2011, Teaching Assistant, ECE 345 Electronic Devices