

Steven D. Pyle

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TECHNICAL INTERESTS

Emerging Devices: Explore intriguing physical phenomena to realize novel computational devices and architectures.

Adaptive Hardware: Realize systems that intrinsically adapt to performance, energy, and reliability criteria at the circuit and architectural level.

EDUCATION

University of Central Florida

Orlando, FL

Master of Science in Electrical Engineering

August 2015

- Thesis: *Self-Scaling Evolution of Analog Computational Circuits*
- Advisor: Dr. Ronald F. DeMara

Bachelor of Science in Electrical Engineering

December 2013

PROFESSIONAL EXPERIENCE

Graduate Assistant

May 2014 - Present

University of Central Florida

Orlando, FL

Evaluation and Proficiency Center – Plays a pivotal role in development of structure, procedures, and secure review-based tutoring. Conduct and proctor computer-based examinations for Electrical and Computer Engineering undergraduate courses. Provide review-based tutoring for students. Develop high quality computer-based questions for Electrical and Computer Engineering undergraduate courses.

RESEARCH ARTICLES AND PROCEEDINGS

S. D. Pyle, H. Li, and R. F. DeMara. "Compact low-power instant store and restore D flip-flop using a self-complementing spintronic device." *IET Electronics Letters (IEEE indexed)*, vol. 52, no. 14, pp.1238-1240, 2016.

R. F. DeMara, N. Khoshavi, S. Pyle, J. Edison, R. Hartshorne, B. Chen, M. Georgiopoulos, "Redesigning Computer Engineering Gateway Courses using a novel Remediation Hierarchy," in *Proceedings of American Association for Engineering Education National Conference (ASEE-16)*, New Orleans, LA, USA, June 26 – 29, 2016.

S. D. Pyle, V. Thangavel, S. M. Williams, and R. F. DeMara, "Self-Scaling Evolution of Analog Computation Circuits with Digital Accuracy Refinement," in *IEEE Proceedings of NASA/ESA Conference on Adaptive Hardware and Systems (AHS 2015)*, pp. 1 – 8, Montreal, QC, Canada, June 15 – 18, 2015. *Best paper award of conference, Citation: "Best Design Paper."*

OTHER RESEARCH EXPERIENCE

Masters Thesis

May 2014-Present

Title – Self-Scaling Evolution of Analog Computational Circuits

Mentors – Dr. Ronald F. DeMara, Dr. Azadeh Vosoughi, Dr. Debashis Chanda

- Developed a method to intrinsically evolve analog computational circuits with a Self-Scaling Genetic Algorithm to improve performance as well as the computationally-tractable range of the hardware

Senior Design

Jan 2013-December 2013

Title – MaRC S-Park: Magnetic Resonant Coupled Smart Parking

- Utilized magnetic resonance coupling to wirelessly charge an electric RC car
- Developed a high frequency (>3MHz) class-E power amplifier

OTHER EXPERIENCE

Volunteer at IEEE Symposium Series on Computational Intelligence 2014

Dec 2014

IEEE Computational Intelligence Society

Orlando, FL

- Attendee registration and distribution of conference materials
- Ensured that the services provided by the hosting hotel were of highest quality

- Resolved any issues that arose with participants

Customer Service Clerk and Grocery Clerk

Jan 2006 – May 2011

Publix Supermarkets Inc.

Orlando, FL

- Delegated tasks with minimal supervision, Took pride in the quality and speed with which tasks were accomplished
- Trained new employees in store protocols, job responsibilities, food handling, and expectations

HONORS and AWARDS

Best Paper Award:

NASA/ESA Conference on Adaptive Hardware and Systems, Best design paper of conference: S. D. Pyle, V. Thangavel, S. M. Williams, and R. F. DeMara, "Self-Scaling Evolution of Analog Computation Circuits with Digital Accuracy Refinement," in *IEEE Proceedings of NASA/ESA Conference on Adaptive Hardware and Systems (AHS 2015)*, Montreal, QC, Canada, June 15 – 18, 2015. *Best paper award of conference, Citation: "Best Design Paper."*

INVITED TALKS

Interview:

"interview," in *IET Electronics Letters (IEEE indexed)*, vol. 52, no. 14, pp. 1188-1188, Sept. 7 2016. doi: 10.1049/el.2016.2125

Panelist:

STEM Graduate Scholar Assistant Roles of the Future. *University of Central Florida*, July 22 2016

REFERENCES

Dr. Ronald F. DeMara*Professor*

Department of Electrical Engineering and Computer Science

University of Central Florida

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ronald.demara@ucf.edu**Dr. Parveen F. Wahid***Professor*

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John Edison*Instructor*

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