Biographical sketch: Elsa Gonsiorowski, May 2018

Systems Software Developer
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Education and Training

2010 – 2016	Rensselaer Polytechnic Institute (Troy, NY) Doctor of Philosophy, Computer Science
2006 – 2010	Rensselaer Polytechnic Institute (Troy, NY) Bachelor of Science, Physics & Computer Science

Research and Professional Experience

2016 – Present:	**Lawrence Livermore National Laboratory** HPC I/O Specialist and Systems Software Developer
2014 – 2016:	**Rensselaer Polytechnic Institute** Computer Scientist
2016:	**Rensselaer Polytechnic Institute** Adjunct Professor in Computer Science
2010 – 2014:	**Rensselaer Polytechnic Institute** Research Assistant

Honors and Awards

2018 **Honorable Mention**: Better Scientific Software Fellowship
2018 **Funding Award**: EPSRC USA-UK RSE Collaboration at *EPCC*
2016 **Attendance Scholarship**: Mentor at *International HPC Summer School*
2015 **Attendance Scholarship**: Student at *International HPC Summer School*
2012 **Attendance Scholarship**: Grace Hopper Celebration via *NSF*
2010 **Founders Award of Excellence**: RPI

Related Publications

1. E. Gonsiorowski, "Enabling Extreme-Scale Circuit Modeling Using Massively Parallel Discrete-Event Simulations," Ph.D. dissertation, C.S. RPI, Troy, NY, May 2016

2. J. M. LaPre, C. D. Carothers, and E. Gonsiorowski, "LORAIN: A Step Closer to the PDES Holy Grail," in *Proc. 2nd ACM Conf. SIGSIM-Principles of Advanced Discrete Simulation*, ser. SIGSIM-PADS '14. Denver, Colorado, USA: ACM, 18–21 May 2014, pp. 3–14

3. J. M. LaPre, E. Gonsiorowski, C. D. Carothers, J. Jenkins, P. Carns, and R. Ross, "Time Warp State Restoration via Delta Encoding," in *Proc. 2015 Winter Simulation Conference*, ser. WSC '15. Huntington Beach, CA, USA: IEEE Press, 6–9 Dec. 2015, pp. 3025–3036

4. M. Plagge, C. D. Carothers, and E. Gonsiorowski, "NeMo: A Massively Parallel Discrete-Event Simulation Model for Neuromorphic Architectures," in *Proc. 4th ACM Conf. SIGSIM-Principles of Advanced Discrete Simulation*, ser. SIGSIM-PADS '16. Banff, AB, Canada: ACM, 15–18 May 2016, pp. 233–244

5. E. Mikida, N. Jain, L. Kale, E. Gonsiorowski, C. D. Carothers, P. D. Barnes, Jr., and D. Jefferson, "Towards PDES in a Message-Driven Paradigm: A Preliminary Case Study Using Charm++," in *Proc. 4th ACM Conf. SIGSIM-Principles of Advanced Discrete Simulation*, ser. SIGSIM-PADS '16. Banff, AB, Canada: ACM, 15–18 May 2016, pp. 99–110

Selected Publications

1. E. Gonsiorowski, C. D. Carothers, and C. Tropper, "Modeling Large Scale Circuits Using Massively Parallel Discrete-Event Simulation," in *Proc. 20th IEEE Int. Symp. Modeling, Anal. Simulation Comput. and Telecommun. Syst.*, ser. MASCOTS '12, Arlington, VA, USA, 7–9 Aug. 2012, pp. 127–133

2. E. Gonsiorowski, J. LaPre, and C. D. Carothers, "Improving Accuracy and Performance Through Automatic Model Generation for Gate-Level Circuit PDES with Reverse Computation," in *Proc. 3rd ACM Conf. SIGSIM-Principles of Advanced Discrete Simulation*, ser. SIGSIM-PADS '15. London, UK: ACM, 10–12 May 2015, pp. 87–96

3. E. Gonsiorowski, C. D. Carothers, and J. LaPre, "Automatic Model Generation for Gate-Level Circuit PDES with Reverse Computation," *ACM Trans. Modeling Comput. Simulation: Best PADS 2015 Special Issue*, May 2017

4. E. Gonsiorowski, C. D. Carothers, J. LaPre, P. Heidelberger, G. Rodrigues, and C. Minkenberg, "Using Quality Of Service Lanes To Control The Impact Of Raid Traffic Within A Burst Buffer," in *Proc. 50th Winter Simulation Conf.*, ser. WSC '17, Las Vegas, NV, USA, 3–6 Nov. 2017