### **DANIEL S. MYERS**

dmyers@rollins.edu

### **Education**

### University of Wisconsin-Madison, Computer Sciences

2008-2014

Ph.D., June 2014

Dissertation: Quantitative Storage System Design

Advisors: Mary K. Vernon and Remzi H. Arpaci-Dusseau

#### University of Florida, Computer Engineering

2000-2005

M.S., December 2005

Thesis: Hyperspectral End-Member Detection with Morphological Neural Networks

Advisor: Gerhard X. Ritter

B.S., summa cum laude, May 2004

### **Professional Experience**

Rollins CollegeWinter Park, FLAssistant Professor of Computer Science2014-Present

GoogleMadison, WIResearch Intern2011

Sandia National LaboratoriesAlbuquerque, NMSenior Member of Technical Staff2006-2008

#### **Research Interests**

Computer performance analytics using machine learning and big data, Queueing theory, Simulation and modeling, Computer science education

#### **Publications**

Undergraduate student co-authors at Rollins College are underlined

- S.R. Shrestha, D.S. Myers, and R.A. Lewin. "Optimizing Strategies for Monopoly: the MEGA Edition Using Genetic Algorithms and Simulations". *Academy of Economics and Finance Journal*, vol. 7 (2016). *Forthcoming*.
- D.S. Myers, J. Rickman, J. Yellen, and <u>R. Zere</u>. "Comparing Exact and Heuristic Algorithms for a Course Timetabling Problem". In *Proc. of the 11th International Conference on the Practice and Theory of Automated Timetabling* (PATAT 2016). Udine, Italy, 8/2016.
- N. Chatlani and D.S. Myers. "Implementing an Adaptive Tutorial System for Coding Literacy Education". In *Proc. of the 47th ACM Technical Symposium on Computer Science Education* (SIGCSE 2016). Memphis, TN, 3/2016.
- S.R. Shrestha, D.S. Myers, and R.A. Lewin. "Genetic Algorithm Optimization of Monopoly: the MEGA Edition". In *Proc. of the 53rd Annual Meeting of the Academy of Economics and Finance*. Pensacola, FL, 2/2016.
- D.S. Myers and M.K. Vernon. "Identifying the Causes of High Latencies in Storage Traces with Workload Decomposition and Feature Selection". In *Proc. of Performance and Capacity 2015*. San Antonio, TX, 11/2015.
- D.S. Myers. "Simulating Variability in Sales Pipelines". In *Proc. of the Southeast INFORMS Annual Meeting 2015* (SEINFORMS 2015). Myrtle Beach, SC, 10/2015.
- D.S. Myers. *Quantitative Storage System Design*. Doctoral Dissertation. University of Wisconsin-Madison, 2014.
- Y. Zhang, D.S. Myers, A.C. Arpaci-Dusseau, R.H. Arpaci-Dusseau. "Zettabyte Reliability with Flexible End-to-end Data Integrity". In *Proc. of the 29th IEEE Conference on Massive Data Storage* (MSST '13). Long Beach, CA, 5/2013.
- D.S. Myers and M.K. Vernon. "Estimating Queue Length Distributions for Queues with Random Arrivals". *ACM SIGMETRICS Performance Evaluation Review*, v.40 n.3, pp. 77-79, 12/2012.
- K.W. Larson, M.J. Procopio, A.I. Gonzales, D.K. Melgaard, F. Rothganger, D.S. Myers, and B.R. Rohrer. "Image Data Processing for Integrated Circuit Analysis". SAND Report 2009-8404. Sandia National Laboratories, Albuquerque, NM, 2009.
- D.S. Myers, D.K. Melgaard, P.J. Lewis, and R.H. Byrne. "Impact of wavelet types on image data characteristics during compression". In *Proc. of Mathematics of Data/Image Pattern Recognition XI.* San Diego, CA, 8/12/2008.
- D.S. Myers, A.I. Gonzales, F.H. Rothganger, and K.W. Larson. "Implementing Wide Baseline Matching Algorithms on a Graphics Processing Unit". SAND Report 2007-6301. Sandia National Laboratories, Albuquerque, NM, 2007.

D.S. Myers. "The Synaptic Morphological Perceptron". In *Proc. of Mathematics of Data/Image Pattern Recognition IX*. San Diego, CA, 8/2006.

L.A. Jensen, J.R. Hipp, R.Q. Villanueava, D.S. Myers, B. Ammons, and J.H. Gauthier. "PGL-Server: development of a stand-alone server-based Earth-model library for seismic monitoring". *In Proc. from the 28th Seismic Research Review: Ground-Based Nuclear Explosion Monitoring Technologies*, Vol. 1, pp. 976-986, 2006.

D.S. Myers. "Hyperspectral End-Member Detection with Morphological Neural Networks". Master's Thesis, University of Florida. 12/2005.

P.C. Reeves, S. Ballard, J.R. Hipp, C.J. Young, D.S. Myers, and B. Ammons. "Improved representation and calculation of base model travel times using the Parametric Grid Library". In *Proc. from the 27th Seismic Research Review: Ground-Based Nuclear Explosion Monitoring Technologies*, Vol. 1, pp. 393-402, 2005.

### Presentations, Talks and Other Writing

"Understanding Data". Invited presentation on predictive analytics for Auritas, Inc. Orlando, FL, 3/2016.

With N. Chatlani. "Implementing an Adaptive Tutorial System for Coding Literacy Education". Poster presentation at SIGCSE 2016. Memphis, TN, 3/2016.

"What I Learned at the Sullivan Foundation Retreat". Rollins Innovation Hub Blog. rollinsinnovationhub.wordpress.com. 1/2016.

"Identifying the Root Causes of High Latencies in Commercial Storage Workloads". Rollins College Faculty Day of Scholarship. Winter Park, FL, 1/2016.

"Identifying the Causes of High Latencies in Storage Traces with Workload Decomposition and Feature Selection". Performance and Capacity 2015. San Antonio, TX, 11/2015.

"Simulating Variability in Sales Pipelines". Southeast INFORMS Annual Meeting 2015. Myrtle Beach, SC, 10/2015.

Interviewed by G. Dawson for an article on queueing and lines. "The Bottom Line". *Orlando Magazine*. 2/2015.

"Quantitative Design of Storage Systems". Invited Talk. Google Madison. Madison, WI, 11/2013

"Estimating Queue Length Distributions for Queues with Random Arrivals". Mathematics of Modeling and Analysis (MAMA 2012). London, UK, 6/2012.

"Performance Models for Google's Storage Infrastructure". Google Madison. Madison, WI, 9/2011

"Performance Models for Google's Storage Infrastructure". Google Storage Performance Research Group. 9/2011

"The Synaptic Morphological Perceptron". Mathematics of Data/Image Pattern Recognition IX. San Diego, CA, 8/2006.

### **Teaching**

#### **Rollins College**

Introduction to Computer Systems*	Fall 2016
Creating the Future (general education capstone) <sup>†</sup>	Fall 2016
Computer Security	Spring 2016
System Software Principles*	Spring 2016
Introduction to Computer Systems*	Fall 2015
Starting a Tech Company <sup>†</sup>	Fall 2015
Problem Solving II with Java (Data Structures and Algorithms)*	Spring 2015
Advanced Computer Systems	Fall 2014
Problem Solving II with Java (Data Structures and Algorithms)	Fall 2014
Computer Networks	Fall 2014

<sup>†</sup> General education course

### University of Wisconsin-Madison

Operating Systems	Spring 2014
Operating Systems	Fall 2013
Computer Systems Modeling Fundamentals	Spring 2012
Linear Programming (Teaching Assistant)	Fall 2009

### **Wisconsin Center for Academically Talented Youth (WCATY)**

Intro to Computer Science 2009-2013 (six summers)

#### **Student Research Projects and Theses Supervised**

Ruzgar Zere	2016
Comparing Exact and Heuristic Course-Timetabling Algorithms	Student-Faculty Research
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Neeraj Chatlani	2015-2016
User-Centered Design of a Course-Timetabling Interface	Student-Faculty Research
Adaptive Tutorial Systems for Coding Literacy Education	Student-Faculty Research

<sup>\*</sup> Two sections

Shree Raj Shrestha	2015
Genetic Algorithm Optimization of Monopoly	Student-Faculty Research
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Joseph Young	2015
Intelligent Agents in Game Development	Honors Thesis

## **Grants and Awards**

Rollins College Student-Faculty Collaborative Scholarship Program (\$13000)	2016
Mindlin Foundation (\$2500)	2015
"Implementing an Adaptive Tutorial System for Coding Literacy Education"	
Rollins College Student-Faculty Collaborative Scholarship Program (\$12650)	2015
SIGMETRICS/Performance Travel Grant	2012
University of Wisconsin Alumni Scholarship	2008
Tau Beta Pi National Engineering Honor Society	2001

# **Professional Service and Development**

Mayor of the Innovate, Create, Elevate (ICE) general education neighborhood	2016-Present
Faculty member, Ashoka U Changemaker Campus renewal initiative	2016
Finance and Services Committee	2015-2016
Innovate, Create, Elevate (ICE) general education neighborhood	2015-Present
Sponsored faculty attendee, Sullivan Foundation IGNITE Retreat	2015
Search committee for tenure-track professor of computer science	2015-2016
Search committee for visiting assistant professor of computer science	2015
Reviewer for The Computer Journal	2012-2014
Judge, Capital Science and Engineering Fair	2012
Reviewer for IEEE Trans. on Signal Processing	2009-2011
UW-Madison Graduate Admissions Committee	2009

### Music

Florida Old-Time Music Championship, flatpicking guitar: first prize	2015
Florida Old-Time Music Championship, fingerpicking guitar: second prize	2015
Madison Shape-Note Singers	2011-2014
UW-Madison Collegium Musicum, viola da gamba and lute	2008-2009
Santa Fe Bluegrass Festival, flatpicking guitar: first prize	2007
Edgewood Bluegrass Festival (Edgewood, NM), guitar: runner-up	2007
Santa Fe Bluegrass Festival, misc. instruments (fingerstyle guitar): first prize	2006

"Daniel Myers: New Traditionalism", profile in *Frets* magazine University of Florida Orchestra, cello

2006 2000-2002