## **DANIEL S. MYERS**

dmyers@rollins.edu dansmyers.github.io

### **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 B.S., summa cum laude, May 2004

### **Professional Experience**

**Rollins College**Winter Park, FL
Assistant Professor of Computer Science
2014-Present

**Google** Madison, WI Storage Performance Research Internship 2011

Sandia National LaboratoriesAlbuquerque, NMSenior Member of Technical Staff2007-2008Member of Technical Staff2006-2007

### **Publications**

Undergraduate student co-authors at Rollins College are underlined.

<u>N. Chatlani</u>, D.S. Myers, J. Rickman, J. Yellen, and <u>R. Zere</u>. "Design of a Multi-Objective Decision Support System for a Course Timetabling Problem". *In preparation*.

D.S. Myers and N. Chatlani. "Implementing an Adaptive Tutorial System for Coding Literacy Education". To appear in *Journal of Computing Sciences in Colleges*, 2017.

- 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.
- 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". Abstract 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. "Towards an Optimal Strategy For Monopoly: The MEGA Edition Using Genetic Algorithms and Simulations". In *Academy of Economics and Finance, Papers and Proceedings*. 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 and Media**

Interviewed by Rob Humphreys for an article on the igniteCS mentoring program at Fern Creek Elementary School. "Igniting Kids' Imagination Through Computer Science". *Rollins* 360. 3/2017.

"Length Distributions and Dynamic Buffer Sizing in Multi-Server Queueing Systems". Southeast Decision Sciences 2017. Charleston, SC, 2/2017

"Using Machine Learning to Understand Storage Performance". Invited research seminar. Florida Southern College. 2/2017.

"Designing an Automated Course Scheduling System". Rollins College Faculty Day of Scholarship. Winter Park, FL, 1/2017.

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

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

With <u>S.R. Shrestha</u> and R.A. Lewin. "Optimal Strategy for Monopoly: The Mega Edition Using Genetic Algorithms and Simulations". Academy of Economics and Finance, 42nd Annual Meeting. Pensacola, Fl, 2/2016.

"What I Learned at the Sullivan Foundation Retreat". Rollins Innovation Hub Blog. rollinsin-novationhub.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.

### **Grants and Awards**

Recognition for excellence in faculty-student advising, 2016-2017.

C. Cheng and D.S. Myers (faculty advisor). "Investigating the Qualities of Hit Songs Using Data Analytics". Rollins College Student-Faculty Collaborative Scholarship Program, 2017. \$6500.

S. Sadeh, J.A. Contino, and D.S. Myers (faculty advisor). "Establishing an After-School Computer Science Program at Fern Creek Elementary School". Google igniteCS, 2016. \$1100.

Recognition for excellence in faculty-student advising, 2015-2016.

R. Zere, N. Chatlani, and D.S. Myers (faculty advisor). "Designing and Implementing a Decision Support System for Course Timetabling". Rollins College Student-Faculty Collaborative Scholarship Program, 2016. \$13000.

D.S. Myers. "Implementing an Adaptive Tutorial System for Coding Literacy Education". Mindlin Foundation, 2015. \$2500.

S.R. Shrestha and D.S. Myers (faculty advisor). "Genetic Algorithm Optimization of Monopoly: the MEGA Edition". Rollins College Student-Faculty Collaborative Scholarship Program, 2015. \$6325.

N. Chatlani, and D.S. Myers (faculty advisor). "Adaptive Tutorial Systems for Coding Literacy Education". Rollins College Student-Faculty Collaborative Scholarship Program, 2015. \$6325.

SIGMETRICS/Performance Travel Grant, 2012. \$1000.

University of Wisconsin Alumni Scholarship, 2008.

Phi Kappa Phi, 2003

Tau Beta Pi National Engineering Honor Society, 2001.

# **Teaching**

### **Rollins College**

Introduction to Computer Systems	2017, 2016, 2015
Digital Media, the Web, and Coding <sup>†</sup>	2017
Artificial Intelligence	2017
System Software Principles	2017, 2016
Creating the Future <sup>†</sup>	2016
Computer Security	2016
Starting a Tech Company <sup>†</sup>	2015
Problem Solving II with Java (Data Structures and Algorithms)	2015, 2014
Advanced Computer Systems	2014
Computer Networks	2014

<sup>†</sup> General education course

### University of Wisconsin-Madison

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

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

Intro to Computer Science 2009-2013 (five summers)

## **Student Theses and Research Projects**

Carmen Cheng	2017
Investigating the Qualities of Hit Songs Using Data Analytics	Student-Faculty Research
Shree Raj Shrestha	2015-2017
Algorithms for Course Timetabling Problems	Honors Thesis
Genetic Algorithm Optimization of Monopoly: the MEGA Edition	Student-Faculty Research
Neeraj Chatlani	2015-2017
Generating Pedagogically Useful Random Programs	Honors Thesis
User-Centered Design of a Course-Timetabling Interface	Student-Faculty Research

Ruzgar Zere 2016 Comparing Exact and Heuristic Course-Timetabling Algorithms Student-Faculty Research

Student-Faculty Research

Joseph Young2015Intelligent Agents in Game DevelopmentHonors Thesis

# **Professional Service and Development**

Adaptive Tutorial Systems for Coding Literacy Education

Faculty advisor, igniteCS after-school mentoring program	2017-Present
Mayor of the Innovate, Create, Elevate (ICE) general education neighborhood	2016-Present
Social innovation and entrepreneurship steering committee	2016-Present
Reviewer for Expert Systems with Applications	2017
Search committee for visiting assistant professor of computer science	2017
Faculty member, Ashoka U Changemaker Campus renewal initiative	2016
Finance and Services Committee	2015-2016

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, Madison, WI	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	2006
University of Florida Orchestra, cello	2000-2002