

## 2016 CCSC-CP REGIONAL CONFERENCE COMMITTEE

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*University of Nebraska-Lincoln*  
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Pre-conference Workshop

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Student Programming Contest,  
Pre-conference Workshop, Papers

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Progress, Conference Publicity,  
Pre-conference Workshop

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Speakers, Conference Publicity, Nifty  
Assignments

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Two-Year College Outreach, Conference  
Publicity

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K-12 Outreach/K-12 Nifty  
Assignments/Lightning Talks

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K-12 Outreach/K-12 Nifty  
Assignments/Lightning Talks,  
Regional Vendors

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K-12 Outreach/K-12 Nifty  
Assignments/Lightning Talks

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K-12 Outreach/K-12 Nifty  
Assignments/Lightning Talks

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Career Fair, Keynote Speakers,  
Regional Vendors

**Connie Hecker**  
*Missouri Western State University*  
Regional Vendors, Career Fair

**Evan Noynaert**  
*Missouri Western State University*  
Student Programming Contest, Regional  
Vendors

**Carol Spradling**  
*Northwest Missouri State University*  
Past Regional CCSC Representative,  
Career Fair, Two-Year College Outreach

**Ron McCleary**  
*Avila University*  
Panel/Tutorials

**Anshuman Singh**  
*University of Central Missouri*  
Panel/Tutorials

**Brian Hare**  
*University of Missouri-Kansas City*  
Regional CCSC Treasurer , Student  
Programming Contest , Two-Year  
College Outreach

**David Pope**  
*Ozarks Technical Community College*  
Two-Year College Outreach

**Linda Webster**  
*Westminster College*  
Student Papers, Two-Year  
College Outreach

**Mahmoud Yousef**  
*University of Central Missouri*  
Nifty Assignments

**Michael Hass**  
*Oklahoma State University*  
Nifty Assignments

**Rick Barker**  
*Washburn University*  
Lightning Talks, Student Posters

**Scott Sigman**  
*Drury University*  
Lightning Talks, Student Papers

**Ajay Bandi**  
*Northwest Missouri State University*  
Student Posters

**Meilani Conley**  
*Southwest Baptist University*  
Works in Progress

**Baochuan Lu**  
*Southwest Baptist University*  
Regional CCSC Editor

**Dustin Daffron**  
*Missouri Western State University*  
Programming Contest

APRIL 1-2, 2016



# 22<sup>ND</sup> ANNUAL CONSORTIUM FOR COMPUTING SCIENCES IN COLLEGES CENTRAL PLAINS REGIONAL CONFERENCE

### *The CCSC-Central Plains 2016 Conference Committee thanks the following:*

- Our National Partners – The National Science Foundation, Turing's Craft, and Wiley – for their continued support of our activities.
- Upsilon Pi Epsilon (International Honor Society for the Computing and Information Disciplines) for sponsorship of student participation in the conference.
- SIGCSE for help in funding the pre-conference workshop.
- Cerner Corporation for its generous donation to pay for the first 30 conference registrations for K-12 teachers and for its generous donation in support of the student programming contest.
- Missouri Western State University Foundation for sponsoring the use of facilities at Missouri Western State University.



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IN-COOPERATION



TIME	CCSC: CENTRAL PLAINS CONFERENCE 2016 – FRIDAY, APRIL 1		
9:00 – 12:00	<p><b>PRE-CONFERENCE WORKSHOP — REMINGTON HALL 105</b></p> <p><b>Teaching Parallel and Distributed Computing with MPI</b>  <i>Libby Shoop, Macalester College and Joel Adams, Calvin College</i>            (NOTE: 31 seats available)            (Thanks to ACM Special Interest Group in Computer Science Education for providing support for this workshop, which was originally presented at SIGCSE 2015.)</p> <p>students understand MPI basics, plus longer programs that use MPI to solve significant problems. The intended audience is CS educators who want to learn about how message passing can be used to teach PDC. No prior experience with PDC or MPI is required; familiarity with a C-family language and the command-line are helpful but not required. The workshop includes: (i) self-paced hands-on experimentation with the working MPI programs, and (ii) a discussion of how these may be used to achieve the goals of CS2013. Participants will work on a remote Beowulf cluster accessed via SSH, and will either need a laptop or a tablet with an SSH client (e.g., BitVise, iSSH) installed, or use desktops available at the venue with pre-installed SSH clients.</p>		

1:00 – 2:00	<p><b>OPENING KEYNOTE ADDRESS — AGENSTEIN HALL 324</b></p> <p><b>How Mobile, Wearables, IoT, and Cloud Technologies are impacting business every day!</b>  <i>Darrin Clawson, Founder &amp; CEO of Engage Mobile, Kansas City, MO USA</i></p> <p><i>Darrin is the founder and CEO of Engage Mobile Solutions. He is an expert at optimizing and simplifying business processes in order to take advantage of mobile devices. His real-world experiences of working with all major mobile operating systems and platforms provide a unique perspective on the current state and future of mobile technology.</i></p>		
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	TRACK ONE	TRACK TWO	TRACK THREE
SESSION 1 2:10 – 3:10	<p><b>PAPERS — REMINGTON HALL 117</b>            Moderator- Scott Bell</p> <p>Seven Reasons Why the Shakespeare Corpus is an Excellent Training Context for Digital Humanities Programming            Brian Kokensparge, Creighton University</p> <p>A Programming Competition Model for Small Live Contests            William Confer, SUNY Polytechnic Institute</p>	<p><b>WORKS IN PROGRESS — REMINGTON HALL 108</b>            Moderator- Evan Noynaert</p>	TBA — REMINGTON HALL 105
3:15 – 3:45	BREAK - VENDORS AND REFRESHMENTS — REMINGTON ATRIUM		
SESSION 2 3:50 – 4:50	<p><b>PAPERS — REMINGTON HALL 117</b>            Moderator- Scott Sigman</p> <p>Do Students Know What They Think They Know? Assessing Student Confidence in a Computer Graphics Course            Timothy Urness, Drake University</p> <p>Incorporating Data Visualization in a Course on Computer Graphics            Timothy Urness, Drake University</p>	<p><b>TUTORIAL — REMINGTON HALL 108</b></p> <p>Reviewing NSF Proposals: Effective Proposal Writing via the Review Process            Paul Tymann, National Science Foundation</p>	TBA — REMINGTON HALL 105
4:55 – 5:10	BREAK - VENDORS AND REFRESHMENTS — REMINGTON ATRIUM		
SESSION 3 5:15 – 6:15	<p><b>NIFTY ASSIGNMENTS — REMINGTON HALL 117</b>            Moderator- Mahmoud Yousef</p> <p>A Bioinformatics Approach For Exploring Text-Processing: Calculating Protein Weights            Jesse Eickholt, Central Michigan University</p> <p>Edward Mirielli, Westminster College</p> <p>Transformational Programming: Using the Shakespeare Corpus to Help Students Learn Decision Structures            Brian Kokensparge, Creighton University</p> <p>Business Continuity and Information Availability            Edward Mirielli, Westminster College</p> <p>Linda Webster, Westminster College</p> <p>Python GUI for a Memory Matching Game            Jamil Saquer, Missouri State University</p> <p>Learning Discrete Mathematics via Interactive Activities            Wen Hsin, Park University</p>	<p><b>TUTORIAL — REMINGTON HALL 108</b></p> <p>Running a Programming Contest Using Mooshak            Tim DeClue, Southwest Baptist University</p>	TBA — REMINGTON HALL 105

6:30 – 8:30	<p><b>BANQUET AND KEYNOTE — HOFF 218-219</b></p> <p><b>The Paradox of Automation</b>  <i>Brian Faros, CIO and Vice President of the Federal Reserve Bank of Kansas City</i></p> <p><b>Abstract:</b> Join Brian Faros, chief information officer at the Federal Reserve Bank of Kansas City, as he explores the topic, “The Paradox of Automation.” He will discuss the exciting role technology will play in shaping, automating and transforming the future of business and human interactions, along with the effects on human skills that could result from the continued abstraction of key hands-on experiences. He’ll also touch on the important role educators and practitioners serve in dealing with the automation paradox in computer science.</p>		
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TIME	CCSC: CENTRAL PLAINS CONFERENCE 2016 – SATURDAY, APRIL 2		
SESSION 4 8:30 – 9:30	<p><b>K-12 KEYNOTE ADDRESS — AGENSTEIN HALL 324</b></p> <p><b>Who Will Teach What, Now, to the Class of 2029?</b>  <i>Bennett Brown, Director of Instruction for Computer Science at Project Lead The Way</i></p> <p><b>Abstract:</b> Computer science professors asked to predict the dawning of strong artificial intelligence give a median prediction of 2029, the year in which this next kindergarten class will graduate from high school. Bennett will offer a vision for educating students now for a world in which intelligent people and machines coexist.</p>		
9:35 – 9:55	<p><b>BREAK - VENDORS AND REFRESHMENTS — REMINGTON ATRIUM</b></p> <p><b>CAREER FAIR— REMINGTON ATRIUM</b></p> <p><b>STUDENT POSTERS JUDGING BEGINS — REMINGTON HALLWAY ON 1<sup>ST</sup> FLOOR</b></p>		

	TRACK ONE	TRACK TWO	TRACK THREE
SESSION 5 10:00 – 11:00	<p><b>PAPERS — REMINGTON HALL 117</b>            Moderator- Anshuman Singh</p> <p>Pedal: A Pedagogical Software Development Process Designed for Student Success            Carol Browning and Scott Sigman, Drury University</p> <p>Achieving the EMBaaSable: Easy Cloud Storage, Push Notifications and Social Media Integration in an Introductory Mobile Computing Class            Michael P. Rogers and Bill Siever, Northwest Missouri State University</p>	<p><b>LIGHTNING TALKS — REMINGTON HALL 108</b>            Moderator- Charles Riedesel</p>	<p><b>K-12 LIGHTNING TALKS — REMINGTON HALL 105</b>            Moderator- Diana Linville</p>

11:00 – 11:30	<p><b>BREAK - VENDORS AND REFRESHMENTS — REMINGTON ATRIUM</b></p> <p><b>CAREER FAIR— REMINGTON ATRIUM</b></p> <p><b>STUDENT POSTER VIEWING — REMINGTON HALLWAY ON 1<sup>ST</sup> FLOOR</b>            Moderator- Rick Barker</p>		
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SESSION 6 11:30 – 12:30	<p><b>STUDENT PAPERS — REMINGTON HALL 105</b>            Moderator- Linda Webster</p>	<p><b>PANEL — REMINGTON HALL 117</b>            Moderator- Tim DeClue</p> <p>Profession-based Learning through Collaboration and Vertical Alignment with K12, Higher Education, and Industry            Diana Linville, Northwest Missouri State University</p> <p>Curt Kelly, Northland Center for Advanced Professional Studies</p> <p>Denise Case, Northwest Missouri State University</p> <p>Michael Rogers, Northwest Missouri State University</p> <p>Carol Spradling, Northwest Missouri State University</p>	TBA — REMINGTON HALL 108
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12:45 – 12:50	POSTER AWARDS CEREMONY — REMINGTON HALL 108		
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12:50 – 1:50	BUSINESS MEETING AND LUNCHEON — HOFF 218-219		
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1:00 – 1:50	LUNCHEON AND PROGRAMMING CONTEST MEETING — HOFF 218-219		
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2:00 – 3:00	CSTA MEETING — HOFF 218-219		
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2:00 – 6:00	STUDENT PROGRAMMING CONTEST		
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