

2014 CCSC-CP Regional Conference Committee

Ed Mirielli, Conference Chair
Westminster College

Linda Webster, Local Facilities Coordinator, Regional Vendors/Employers
Westminster College

Jim Buchan, Conference Co-Chair, Pre-Conference Workshop, Keynote Speakers
College of the Ozarks

Judy Mullins, Regional CCSC Representative, Board Chair & Treasurer,
Pre-conference Workshop, Two-Year College Outreach
University of Missouri-Kansas City

Brian Hare, Regional CCSC Registrar & Membership Chair, Regional Employers
University of Missouri-Kansas City

Scott Bell, Regional CCSC Secretary, Conference Publicity, K-12 Outreach
Kansas State University

Baochuan Lu, Regional CCSC Editor
Southwest Baptist University

Michael P. Rogers, Regional CCSC Webmaster, Conference Publicity, Keynote
Speakers, Student Programming Competition
Northwest Missouri State University

Carol Spradling, Past Regional CCSC Representative, K-12 Outreach & Lightning
Talks, Keynote Speakers, Regional Vendors/Employers, Two-Year College Outreach
Northwest Missouri State University

David Heise, Conference Papers Chair
Lincoln University

Baoqiang Yan, Panels, Workshops, and Tutorials
Missouri Western State University

Mahmoud Yousef, Nifty Assignments
University of Central Missouri

Rick Barker, Student Poster Competition
Washburn University

Tim DeClue, Cerner Corporation K-12 Scholarships, K-12 Outreach
Southwest Baptist University

Wen Hsin, Lightning Talks
Park University

Ron McCleary, 2013 Past Conference Chair,
Student Programming Competition
Avila University

George Gibeau, Two-Year College Outreach
Ozark Technical Community College

David Monismith, Student Programming Competition
Northwest Missouri State University

Nat Graham, Lightning Talks - K12, K-12 Outreach
Columbia Area Career Center, Columbia, MO

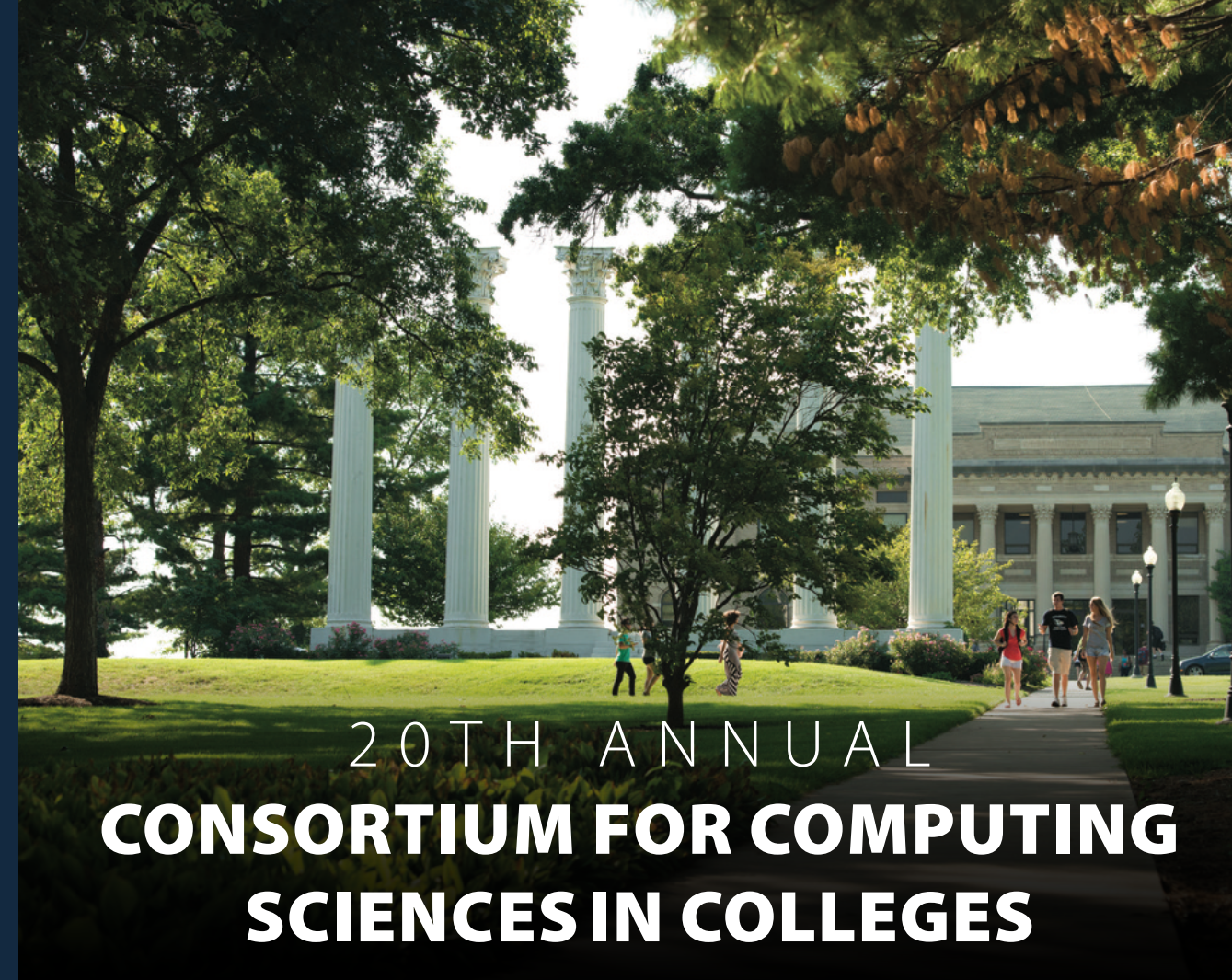
Angela Klein, Lightning Talks - K12, K-12 Outreach
Liberty High School, Liberty, MO

Lesley Martin, Lightning Talks - K12, K-12 Outreach
North Kansas City High School, Kansas City, MO

John Pais, Lightning Talks - K12, K-12 Outreach
Ladue Horton Watkins High School, St. Louis, MO

The CCSC-Central Plain 2014 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.
- Henry Walker, Grinnell College for providing and supporting the online system used to managing and peer reviewing the papers, workshops, tutorials, and other conference submissions.



501 Westminster Avenue, Fulton, MO 65251

April 4 - 5, 2014

www.westminster-mo.edu



In-Cooperation



	TRACK ONE	TRACK TWO	TRACK THREE
9:00 - 12:00	<div>PRE-CONFERENCE WORKSHOP - <i>Coulter Science Center 116</i></div> <div>Introducing Secure Coding in CS0, CS1, and CS2</div> <div>Siddharth Kaza, Towson University and Elizabeth K. Hawthorne, Union County College</div> <div>NOTE: The workshop is limited to 20 attendees and attendees will recience a \$100 stipend for participation.</div> <div>Abstract The ACM CS2013 curriculum includes Information Assurance and Security as a pervasive knowledge area. However, introducing security in lower level courses is challenging because of lack of appropriate teaching resources and training. We will introduce attendees to secure coding through hands-on exercises, and provide self-contained, lab-based modules designed to be injected into CS0-CS2 with minimal impact on the courses. These lab modules have been evaluated using large-scale quasi-experimental strategies and have found to be effective at the CS0/CS1/CS2 level. Participants are encouraged to bring in their own course syllabi and labs to modify to include secure coding concepts.</div>		
	<div>OPENING KEYNOTE ADDRESS - <i>Coulter Science Center Lecture Hall</i></div> <div>IBM - Emerging Technologies for a Smarter Planet</div> <div>Michael S. Robison , Manager - Distributed Database Management, IBM Global Technology Services , Columbia, MO Delivery Center, USA</div> <div>Abstract The majority of this presentation will focus on a few key areas that are important to IBM, such as Big Data, Analytics, and Smarter Planet. In reality all three of these are tied together and by focusing on any one of them, the other two come into play as well. I will be providing many real work examples where Predicative Analytics are used. In addition to these key areas, I will spend a few minutes towards the end to highlight what IBM is doing in Columbia, MO and what opportunities are available.</div>		
1:00 - 2:00			
Session 1 • 2:10 - 3:10	<div>Papers: Simulations – <i>Coulter Science Center Lecture Hall</i></div> <div>Moderator: Mahmoud Yousef, University of Central Missouri</div> <div>Crowdsourcing Traffic Simulation to Improve Signal Timing</div> <div>Derek Riley; Jesus Quevedo; Raul Barrera; Gwen Nellen, University of Wisconsin-Parkside</div> <div>WU-Bots - A Robot Simulator for Students</div> <div>Bruce Mechtly; Tyler Wade; Joshua Wurtz, Washburn University</div> <div>Teaching Chi-Square Goodness of Fit Test Using Simulation in Introductory Classes</div> <div>Leslie Chandrakantha, John Jay College</div>	<div>Tutorial - <i>Coulter Science Center 329</i></div> <div>Using Chapel to Teach Parallel Concepts</div> <div>David Bunde, Knox College</div> <div>2:10 - 3:40 (90 minutes)</div>	<div>TBA</div>
	<div>3:15 - 3:45 • Break - Vendors and refreshments (<i>Coulter Science Center 204</i>)</div>		
Session 2 • 3:50 - 4:50	<div>Papers: Classroom/Curriculum - <i>Coulter Science Center Lecture Hall</i></div> <div>Moderator: Rick Barker, Washburn University</div> <div>Using CS2013 for a Department's Curriculum Review: A Case Study</div> <div>Henry Walker, Samuel Rebelsky, Grinnell College</div> <div>Using Test Questions as a Sole Method for Developing and Assessing Student Critical Thinking Skills in a Computer Organization Course</div> <div>Brian Kokensparger, Creighton University</div> <div>Spiraling Computational Theory into Control with CS1</div> <div>Klan Pokomy, McKendree University</div>	<div>Workshop - <i>Coulter Science Center 329</i></div> <div>A Tutorial on Storyboards</div> <div>Michael Rogers, Andrew Shoemake, Northwest Missouri State University</div> <div>3:50 - 5:50 (120 minutes)</div>	<div>Lightning Talks - <i>Coulter Science Center 330</i></div> <div>Moderator: Wen Hsin, Park University</div>
	<div>4:55 - 5:10 • Break - Vendors and refreshments (<i>Coulter Science Center 204</i>)</div>		
Session 3 • 5:15 - 6:15	<div>Panel: Software Engineering - <i>Coulter Science Center Lecture Hall</i></div> <div>Moderator: Ron McCleary, Avila University</div> <div>Essentials of Software Engineering: What To Teach When You Can't Teach Everything</div> <div>Eric Shade, Missouri State University; Linda Webster, Westminster College; Tim DeClue, Southwest Baptist University; Scott Sigman,Drury University</div>	<div>TBA</div>	
	<div>6:30 - 8:30 • BANQUET AND KEYNOTE - <i>Mueller Student Center</i></div> <div>Creative Uses of Technology to Market Ideas, Solve Business Problems, and Win a Few Awards in the Process</div> <div>Rich Schmick , Director of Organizational Development, VML, Kansas City, MO USA</div> <div>Abstract How can technology help medical school candidates earn a scholarship while waiting for the bus? How can social media promote an after school educational program while also helping an electric car built by high school students reach Washington D.C? Questions like these were solved when creative thinkers and technologists worked together to bridge the gap between the digital and physical world. Rich Schmick will present two case studies that show how creative uses of technology, such as augmented reality and social listening platforms, can be used to market ideas, solve business problems, and win a few awards in the process.</div>		
FRIDAY			

	TRACK ONE	TRACK TWO	TRACK THREE
Session 4 • 8:30 - 9:30	Papers: (Mobile) Application Development - <i>Coulter Science Center Lecture Hall</i> <i>Moderator:</i> Diana Linville, Northwest Missouri State University Autonomous Search and Retrieval Sage Kleczynski, Suranga Hettiarachchi, Matthew Rayner, Indiana University Southeast Storyboards: A Graphical Development Tool for the Rest of Us Michael Rogers, Andrew Shoemake, Northwest Missouri State University iOS App Programming Using an Inverted Classroom in a Small Department Megan Thomas, California State University, Stanislaus	Workshop - <i>Coulter Science Center 329</i> Computing Foundations for the Scientist: A New Approach for Non Majors Cathy Bareiss, Larry Vail, Olivet Nazarene University 8:30 - 10:30 (120 minutes)	Nifty Assignments - <i>Coulter Science Center 330</i> <i>Moderator:</i> TBA Evaluating OpenID John Cigas, Park University Integrating Mock Cybercrime Scenarios in Computer Forensics Courses Elizabeth Hawthorne, University of Maryland University College Using Puzzle Simulations to Introduce Object Oriented Programming with BYOB John Pais, Ladue Horton Watkins High School
	9:35 - 9:55 • Break - Vendors and refreshments (<i>Coulter Science Center Atrium</i>)		
Session 5 • 10:00 - 11:00	Papers: Interdisciplinary/Team-based Learning - <i>Coulter Science Center Lecture Hall</i> <i>Moderator:</i> Baochuan Lu, Southwest Baptist University Team-based Learning in a Data Structures Course Daniel Cliburn, University of the Pacific An Interdisciplinary Approach to Teaching Computer Ethics Course Aparna Mahadev, Sonya Coner, Worcester State University Using Interdisciplinary Teams to Develop Comprehensive Integrated Digital Marketing Communication Campaigns Carol Spradling, Chirs Graves, Steven Chappell, David Shadinger, Deb Toomey, Northwest Missouri State University	Workshop - <i>Coulter Science Center 329</i> Strategically Recruiting Diverse Students into Your Undergraduate Computing Major Rebecca Dohrman, Maryville University/NCWIT 10:30 - 11:45 (75 minutes)	Student Poster Contest Judging - <i>Coulter Science Center 126</i> <i>Moderator:</i> Rick Barker (Only for student poster contestants and contest judges)
Session 6 • 11:30 - 12:30	11:00 - 11:30 • Break - Vendors and refreshments (<i>Coulter Science Center Atrium</i>)		
	Papers: CS0/CS1 - <i>Coulter Science Center Lecture Hall</i> <i>Moderator:</i> Scott Bell, Kansas State University On Video-Based Instruction for Introductory Computer Programming Eric Manley, Timothy Urness, Drake University Computing and the Affective Domain: Learning to Love (and Persist) in Computer Science Tim DeClue, Southwest Baptist University Teaching True Computer Science Principles to the General Student Baochuan Lu, Southwest Baptist University; Angie Klein, Liberty High School; Meilani Conley, Southwest Baptist University	Ligntning Talks K-12 - <i>Coulter Science Center 330</i> <i>Moderator:</i> TBA	Student Poster Presentations - <i>Coulter Science Center 126 & Atrium</i> <i>Moderator:</i> Rick Barker
SATURDAY	12:40 - 12:45 • POSTER AWARDS CEREMONY - <i>Coulter Science Center Lecture Hall</i>		
	12:50-1:50 • BUSINESS MEETING AND LUNCHEON - <i>Mueller Student Center</i> (For students and coaches participating in Programming Contest. Meeting will begin about 1:45 in Coulter Science Center Lecture Hall)		
	2:00 - 3:00 • CSTA MEETING - <i>Coulter Science Center Lecture Hall</i>		
	2:00 - 6:00 • STUDENT PROGRAMMING CONTEST General Meeting - Coulter Science Center Lecture Hall Programming Teams assigned to room in Coulter Science Center - Coaches in Coulter Science Center 121		