CCSC

CONSORTIUM FOR COMPUTING SCIENCES IN COLLEGES

Central Plains Region

28th Annual Conference

Drury University
April 1 - April 2, 2022

Conference
Program

DRURY UNIVERSITY
1873

Scott Sigman , Ph.D.
2022 CCSC Central Plains
Conference Chair

CCSC
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Central Plains Region

2022 CCSC Conference Welcome

Welcome to the 28th Annual CCSC Central Plains Regional conference, to Drury University and to Springfield, Missouri. Our program features two distinguished speakers, Michael Newton, Software Scientists/Chief Engineer at L3Harris Technologies, and Mark Garton, SR Director of IT Governance and Data Strategy at O'Reilly Auto Parts Stores, Inc. The conference features an engaging program of paper presentations, tutorials, panels, "Nifty Assignments", Lightning Talks, student poster presentations, student papers, and a student programming contest. Activities begin on Friday morning with a pre-conference workshop and conclude on Saturday afternoon with our annual student programming contest.

A wide range of topics are addressed by conference presentations. Topics vary from preparing students to work as developers and IT professionals in a post-pandemic work environment to teaching functional programming remotely. In addition to technical sessions, time for networking has been provided during numerous breaks. Take time to be challenged by our presenters, to glean new ideas for use in your classroom and to visit with others who have a passion for improving computing education.

Central Plains Region

Friday Opening Keynote Speaker

Michael Newton
L3Harris Corporation

Michael Newton is a Software Scientist at L3Harris Technologies leading system engineering and software engineering teams in the development of mission system software. He is a graduate of Southwest Baptist University with a B.S. in Computer Science/Mathematics and a M.S in Software Engineering from Texas Christian University. His career includes technically leading geographic disparate, embedded software engineering teams at Motorola Solutions for 28 years. In addition, he taught Computer Science courses from a practitioners perspective at Southwest Baptist University during the 2002-2003 school year.

Dinner Keynote Speaker

Mark Garton is the Senior Director of IT Governance and Data Strategy at O'Reilly Auto Parts Stores, Inc. He leads teams responsible for information security, software quality assurance, and data strategy. With over 24 years of experience as an IT professional, he has worked in information technology from software development to establishing a cyber security program. He is passionate about developing leaders and created a leadership development program for new technology managers. He holds a BA in Mathematics from Drury University and a Master's Degree in Computer Information Systems from Missouri State University.

Mark Garton
O'Reilly Auto Parts Stores, Inc.
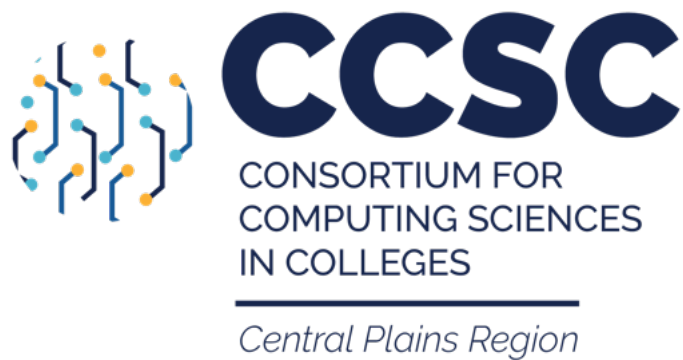
Pre-conference Workshop

Michael P. Rogers, Ph.D.
Assistant Professor,
University of Wisconsin, Oshkosh

Michael is an Assistant Professor at the University of Wisconsin Oshkosh where, among other things, he teaches courses in Mobile App Development, Web Software Development, and Software Engineering. He has published numerous apps, including his most recent Flutter app The G.R.E.A.T. App (not a boast, rather an acronym for General Revenue, Expenditures, And Taxes).
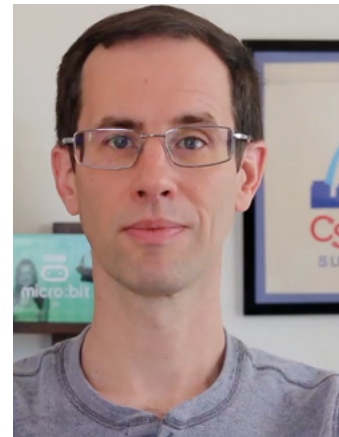
Bill Siever, Ph.D.
Teaching Professor,
Washington University, St Louis

Bill is a Teaching Professor at Washington University in St. Louis, where he teaches courses in Computer Science, Computer Engineering, and the Internet of Things. Bill's consulting has included embedded systems and app development.

Schedule of Events
Friday, April 1, 2022

9:00 am - Noon

Pre-conference Workshop
Flutter: n Platforms, 1 Codebase, 0 Problems
Michael Rogers, University of Wisconsin Oshkosh; Bill Siever, Washington University in St. Louis
LOCATION: Springfield Hall (second floor) Lab A

1:00 - 2:00 pm

Opening Assembly
A Software Engineering Career from the Perspective of Availability, Reliability and Maintainability
Keynote: Michael Newton, L3Harris Corporation
LOCATION: Lay Auditorium

2:00 - 5:00 pm

Vendor Fair
LOCATION: Breech Vestibule

2:15 - 3:15 pm

Papers	**Panels**	**Vendor's Presentations**
LOCATION: Breech 103	**LOCATION: Breech 102**	**LOCATION: Breech 105**
Moderator TBD	Moderator TBD	
Integrating Data Science Into a Computer Science Curriculum	**Challenges Developing and Teaching Online Professional Courses for Technical Graduate Programs**	
Kian Pokorny/McKendree University	*Denise Case, Ajay Bandi, Nathan Eloe, Aziz Fellah, Charles Hoot/Northwest Missouri State University*	
How to Secure ABET Accreditation for a Cybersecurity Program: A Case Study		
Xiaodong Yue, Belinda Copus, Hyungbae Park/University of Central Missouri		

3:15 - 4:00 pm

Break and Vendor's Exhibits
LOCATION: Breech Student Lounge

4:00 - 5:00 pm

Papers	**Panels**	**Vendor's Presentations**
LOCATION: Breech 103	**LOCATION: Breech 102**	**LOCATION: Breech 105**
Moderator TBD	Moderator TBD	
A Snapshot of Current and Trending Practices in Mobile Application Development	**Teaching Multiple Graduate Sections with Large Class Sizes**	
Michael Rogers/University of Wisconsin Oshkosh; Jonathan Gratch/ Texas Woman's University	*Nathan Eloe, Ajay Bandi, Denise Case, Aziz Fellah, Charles Hoot/Northwest Missouri State University*	
Web Accessibility: An Evaluation of CCSC Central Plains Participant's University Homepages		
Michael Whitney, Stephen Dannelly Winthrop University		

5:00 - 5:30 pm

Meet and Greet
LOCATION: Breech Student Lounge

5:45 - 8:00 pm

Banquet
How the Pandemic Has Changed Talent Management
Keynote: Mark Garton, O'Reilly Auto Parts Stores, Inc.
LOCATION: The Robert W Plaster Family Gallery/O'Reilly Event Center

Schedule of Events
Saturday, April 2, 2022

8:30 - 9:00 am   **Poster Contest Setup**
LOCATION: Wilhoit Theatre Vestibule (South entrance Breech)

9:00 - 10:00 am

Student Papers
LOCATION: Breech 105
Moderator TBD

Poster Contest
LOCATION: Wilhoit Theatre Vestibule (Breech)
Moderator TBD

10:00 - 10:30 am   **Break and Vendor's Exhibits**
LOCATION: Breech Student Lounge

10:30 - 11:30 am

Papers
LOCATION: Breech 103
Moderator TBD

A Literature Review on User Acceptance of AI-Enabled Application
Gary Yu Zhao/Dakota State University
Cindy Zhiling Tu/Northwest Missouri State University

A Functional Programming Course In Remote Learning Model: An Experience Report
Fahmida Hamid/New College of Florida

"Nifty Assignments"/Lightning Talks
LOCATION: Breech 102
Moderator TBD

A Way to Visualize Higher Dimensional Arrays, Matrices and Spaces
Cong-Cong Xing/Nicholls State University
Jun Huang/Baylor University

11:45 am - 12:45 pm   **CCSC Business Meeting/Luncheon**
LOCATION: The Robert W Plaster Family Gallery/O'Reilly Event Center

Programming Contest Meeting/Luncheon
LOCATION: The Robert W Plaster Family Gallery/O'Reilly Event Center

1:00 - 5:00 pm   **Programming Contest**
LOCATION: Springfield Hall (second floor) Lab A

Thank You to Our Sponsors

Platinum Level

Google for Education

National Science Foundation

Bronze Level

MERCURY LEARNING AND INFORMATION

MERCY COLLEGE
FOR THOSE WITH A PASSION TO GET AHEAD

Local Level

FOXHOLE TECHNOLOGY

Map
Drury University

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Central Plains Region

DRURY UNIVERSITY · 1873

DRURY UNIVERSITY
900 NORTH BENTON AVENUE
SPRINGFIELD, MISSOURI 65802

WELCOME CENTER

Visitor parking

Visitor parking is available on Drury Lane and Burnham Circle. Visitor permits are available at:
Admission Office (Bay Hall)
Security sub-station (College Park)
Security Office (Findlay Student Center)
Without a valid visitor permit you are limited to 30 minutes of parking.

Residential Parking
- A Freeman
- B Smith
- C Wallace
- D College Park

Non-Residential Parking
- 2 Shewmaker
- 3 Hammons
- 4 HPER
- 5 Webster
- 6 Benton
- 7 Summit
- 8 Clay
- 9 Parsonage
- 10 Facilities

★ Bay Hall / Welcome Center
● Other buildings

2 Stone Chapel
3 Burnham Hall
4 Pearsons Hall
5 F.W. Olin Library
6 Ley Hall
7 Mabee Performing Arts Center
   a O'Bannon Music Center
   b Clara Thompson Hall
   c Lydy Hall
8 Sunderland Hall
9 Weiser Gymnasium
10 Manley Hall
11 Historic President's House
12 College Park
13 Jefferson Park
   a Springfield Police Department Substation
   b Community Center
   c Drury Security Substation
14 Sigma Pi House
15 Kappa Alpha House
16 Lambda Chi Alpha House
17 Sigma Nu House
18 Congregational Hall
19 The Parsonage, Honors House
20 Summit Park
21 Smith Hall
22 Wallace Hall
23 Findlay Student Center
   a D.Cycle entrance
24 Freeman Panhellenic Hall
25 Hutchens HPER
26 Weiser Gymnasium
27 Barber Fitness Center
28 Springfield Hall
29 O'Reilly Family Event Center
30 Breech School of Business Administration
31 Harrison Stadium
32 Theatre Shop
33 Pool Art Center
34 Facilities Services
35 Robert Warmack Faculty Studio
36 Curry Sports Complex
37 Drury Law Enforcement Academy
38 Hammons School of Architecture
39 Trustee Science Center
40 Drury Diversity Center at Historic Washington Avenue Baptist Church
41 Shewmaker Communication Center
42 University Suites
43 Rose O'Neil House

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CHESTNUT EXPRESSWAY
CENTRAL STREET
BENTON AVENUE
DRURY LANE
CLAY AVENUE
CALHOUN STREET
WEBSTER STREET
JEFFERSON AVENUE
BOB BARKER BLVD.