

28th Annual Conference

Drury University April 1 - April 2, 2022

Conference Program





DRURY UNIVERSITY



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



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 preconference 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



Michael Newton L3Harris Corporation

Friday Opening Keynote Speaker

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.



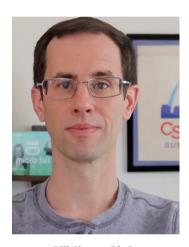
Central Plains Region

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 105

LOCATION: Breech 103 LOCATION: Breech 102 Moderator: Mahmoud Yousef Moderator: Diana Linville

Integrating Data Science Into Challenges Developing and Teaching a Computer Science Curriculum Online Professional Courses for Kian Pokorny/McKendree University **Technical Graduate Programs**

Denise Case, Ajay Bandi, Nathan Eloe, **How to Secure ABET Accreditation** Aziz Fellah, Charles Hoot/Northwest Missouri

State University

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 105

with Large Class Sizes

LOCATION: Breech 103 LOCATION: Breech 102 Moderator: Baochuan Lu Moderator: Rick Barker **Teaching Multiple Graduate Sections**

A Snapshot of Current and Trending **Practices in Mobile Application Development**

Michael Rogers/University of Wisconsin Oshkosh; Jonathan Gratch/ Texas

Woman's University

Web Accessibility: An Evaluation of CCSC

Central Plains Participant's University

Homepages

Michael Whitney, Stephen Dannelly Winthrop University

Nathan Eloe, Ajay Bandi, Denise Case, Aziz Fellah, Charles Hoot/Northwest Missouri

State 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 105Moderator: Scott Sigman

Poster Contest

LOCATION: Wilhoit Theatre Vestibule (Breech)

Moderator: Joseph Kendall-Morwick

10:00 - 10:30 am

Break and Vendor's Exhibits

LOCATION: Breech Student Lounge

10:30 - 11:30 am

Papers

LOCATION: Breech 103 Moderator: Judy Mullins

A Literature Review on User Acceptance of Al-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

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