

WEDNESDAY 8:30 AM - 5:00 PM
Pre-Symposium Events (room: TBA in Convention Center)

WEDNESDAY 7:00 PM - 10:00 PM
Workshops

- Workshop #1: CReST-Security Knitting Kit: Ready to Use Teaching Resources to Embed Security Topics into Upper Division CS Courses (room: L1)
Ambareen Siraj, Tennessee Tech University
Sheikh Ghafoor, Tennessee Tech University
- Workshop #2: Making Music with Computers: Creative Programming in Python (room: L2-L3)
Bill Manaris, College of Charleston
Tobias Kohn, ETH Zürich
- Workshop #3: A Web-Based IDE for Teaching with Any Language (room: L5-L6)
Dan Armendariz, Harvard University
David Malan, Harvard University
Nikolai Onken, Cloud9
- Workshop #4: High Yield in the Short Term: Planning Strategically to Get Women into your Major (room: L8)
Lecia Barker, University of Texas at Austin
Leisa Thompson, University of Virginia
- Workshop #5: Guiding Students to Discover CS Concepts and Develop Process Skills using POGIL (room: L9)
Clifton Kussmaul, Muhlenberg College
Helen Hu, Westminster College
Chris Mayfield, James Madison University
- Workshop #6: Engage, Energize and Empower Your Students with Team-Based Learning (room: L10)
Lenore Horowitz, University at Albany
George Berg, University at Albany
Kimberly Van Orman, University at Albany
- Workshop #7: Teaching Parallel Computing Concepts with OpenMP (room: L11-L12)
Joel Adams, Calvin College
Richard Brown, St. Olaf College
Elizabeth Shoop, Macalester College

Workshop #8: Using OpenDSA eTextbooks in Your Class (room: L13-L14)

Clifford Shaffer, Virginia Tech

Thomas Naps, University of Wisconsin--Oshkosh

Susan Rodger, Duke University

Workshop #9: Reading and Writing like Computer Scientists: How to Promote Critical Thinking and Student Engagement (room: River Bluff)

Mark Hoffman, Quinnipiac University

Jerod Weinman, Grinnell College

Workshop #10: Lego-based Case Studies for Teaching Software Engineering Concepts throughout the Curriculum (room: Sultana)

Stan Kurkovsky, Central Connecticut State University

Workshop #11: Peer Instruction in Computing: a Focus on Student Learning (room: Mississippi)

Daniel Zingaro, University of Toronto Mississauga

Leo Porter, University of California, San Diego

Quintin Cutts, University of Glasgow

John Glick, University of San Diego

Joe Hummel, University of Illinois at Chicago

Cynthia Lee, Stanford University

Jaime Spacco, Knox College

Workshop #12: How to launch a STARS Computing Corps cohort to improve retention and broaden participation in computing (room: Cotton Row)

Jamie Payton, University of North Carolina at Charlotte

Tiffany Barnes, North Carolina State University

THURSDAY 8:30 AM - 10:00 AM
Plenary Session - John Sweller - UNSW Australia

THURSDAY 10:00 AM - 10:45 AM
Break, Exhibits & Demos

Demos (room: Exhibit Hall)

Thu 10:00 AM - 10:45 AM

OpenDSA: An Interactive eTextbook for Computer Science Courses

Clifford Shaffer, Virginia Tech

OSBLE+: A next-generation learning management and analytics environment for computing education

Daniel Olivares, Washington State University

Christopher Hundhausen, Washington State University

NSF Showcase (room: Exhibit Hall)

Thu 10:00 AM - 11:30 AM

CrowdGrader: Peer Grading with Incentives

Luca de Alfaro, UC Santa Cruz

Project MLExAI: An Innovative Model for Teaching Core AI Concepts

Ingrid Russell, College of Staten Island

Zdravko Markov, College of Staten Island

Susan Imberman, College of Staten Island

Computing in the Arts: Community Building and Curriculum Development

Jennifer Burg, Wake Forest Univ.

C5 - Catalyzing Computing and Cybersecurity in Community Colleges

Melissa Jane Dark, Purdue

Beth Hawthorne, Purdue

Corrinne Sande, Purdue

THURSDAY 10:45 AM - 12:00 PM**Papers: Data Structures (room: L11-L12)****Thu 10:45 AM - 12:00 PM**

- 10:45 AM Paper vs. Computer-based Exams: A Study of Errors in Recursive Binary Tree Algorithms
Scott Grissom, Grand Valley State University
Laurie Murphy, Pacific Lutheran University
Renée McCauley, College of Charleston
Sue Fitzgerald, Metropolitan State University
- 11:10 AM Stay on These Roads: Potential Factors Indicating Students' Performance in a CS2 Course
Holger Danielsiek, Westfälische Wilhelms-Universität Münster
Jan Vahrenhold, Westfälische Wilhelms-Universität Münster
- 11:35 AM BRIDGES: A System to Enable Creation of Engaging Data Structures Assignments with Real-World Data and Visualizations
David Burlinson, The University of North Carolina at Charlotte
Mihai Mehedint, The University of North Carolina at Charlotte
Chris Grafer, The University of North Carolina at Charlotte
Kalpathi Subramanian, The University of North Carolina at Charlotte
Jamie Payton, The University of North Carolina at Charlotte
Michael Youngblood, Xerox A PARC company
Robert Kosara, Tableau Software
Paula Goolkasian, The University of North Carolina at Charlotte

Papers: Computational Thinking (room: L13-L14)**Thu 10:45 AM - 12:00 PM**

- 10:45 AM Investigating Differences in Wiki-based Collaborative Activities between Student Engagement Profiles in CS1
Adam Eck, University of Nebraska-Lincoln
Leen-Kiat Soh, University of Nebraska-Lincoln
Duane Shell, University of Nebraska-Lincoln
- 11:10 AM A Study on the Impact of Multidisciplinary Collaboration on Computational Thinking
S. Monisha Pulimood, The College of New Jersey
Kim Pearson, The College of New Jersey
Diane C. Bates, The College of New Jersey
- 11:35 AM Computational Thinking as Liberal Studies
Dave Mason, Ryerson University
Irfan Khan, Ryerson University
Vadim Farafontov, Ryerson University

Papers: Research on Learning (room: L5-L6)	Thu 10:45 AM - 12:00 PM
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| 10:45 AM | An Examination of Layers of Quizzing in Two Computer Systems Courses
<i>Cindy Norris, Appalachian State University</i> |
| 11:10 AM | Subgoals Help Students Solve Parsons Problems
<i>Briana Morrison, Georgia Institute of Technology</i>
<i>Lauren Margulieux, Georgia Institute of Technology</i>
<i>Barbara Ericson, Georgia Institute of Technology</i>
<i>Mark Guzdial, Georgia Institute of Technology</i> |
| 11:35 AM | As CS Enrollments Grow, Are We Attracting Weaker Students?: A Statistical Analysis of Student Performance in Introductory Programming Courses Over Time
<i>Mehran Sahami, Stanford University</i>
<i>Chris Piech, Stanford University</i> |

Papers: Professional Development (room: L2-L3)	Thu 10:45 AM - 12:00 PM
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| 10:45 AM | Implementation and Outcomes of a Three-Pronged Approach to Professional Development for CS Principles
<i>Chrystalla Mouza, University of Delaware</i>
<i>Lori Pollock, University of Delaware</i>
<i>Kathleen Pusecker, University of Delaware</i>
<i>Kevin Guidry, University of Delaware</i>
<i>Ching-Yi Yeh, University of Delaware</i>
<i>James Atlas, University of Delaware</i>
<i>Terry Harvey, University of Delaware</i> |
| 11:10 AM | Deploying Exploring Computer Science Statewide
<i>Helen Hu, Westminster College</i>
<i>Cecily Heiner, Southern Utah University</i>
<i>Jay McCarthy, University of Massachusetts Lowell</i> |
| 11:35 AM | TEALS: Teacher Professional Development Using Industry Volunteers
<i>Nathaniel Granor, Microsoft/TEALS</i>
<i>Leigh Ann DeLyser, CSNYC</i>
<i>Kevin Wang, Microsoft/TEALS</i> |

Panel (room: Cotton Row)	Thu 10:45 AM - 12:00 PM
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| Engaging CS Alumni from Afar | <i>Christine Shannon, Centre College</i>
<i>James Kiper, Miami University</i>
<i>Samuel Rebelsky, Grinnell College</i>
<i>Janet Davis, Whitman College</i> |
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Panel (room: Steamboat) Thu 10:45 AM - 12:00 PM

Rediscovering the Passion, Beauty, Joy, and Awe: Making Computing Fun Again, part 8

Daniel Garcia, UC Berkeley

Josh Caldwell, code.org

Pamela Fox, Khan Academy

Jeremy Keeshin, CodeHS

Special Session (room: Mississippi) Thu 10:45 AM - 12:00 PM

The Micro-Cluster Showcase: 7 Inexpensive Beowulf Clusters for Teaching PDC

Joel Adams, Calvin College

Jacob Caswell, St. Olaf College

Suzanne Matthews, U.S. Military Academy

Charles Peck, Earlham College

Elizabeth Shoop, Macalester College

David Toth, Centre College

James Wolfer, Indiana University, South Bend

Supporter Session (room: River Bluff) Thu 10:45 AM - 12:00 AM

Piazza Supporter Session

Supporter Session (room: Sultana) Thu 10:45 AM - 12:00 AM

Teradata Supporter Session - Leveraging the Teradata University Network for Data Management Courses

THURSDAY 12:00 PM - 1:45 PM

LUNCH: FirstTimer's - SIGCSE Award for Lifetime Service to the Computer Science Education Community - Barbara Boucher Owens - Southwestern University

THURSDAY 1:45 PM - 5:00 PM
Student Research Competition Poster Session (room: Exhibits Hall)

Applying Formal Models of Instructional Design to Measurably Improve Learning in Introductory Computing

Austin Cory Bart, Virginia Tech

Learning to Program Using Online Forums, A Comparison of Links Posted on Reddit and Stack Overflow

Caroline D. Hardin, University of Wisconsin-Madison

Open Sourcing the Classroom

Mike Izbicki

A Wavelet Transform Module for a Speech Recognition Virtual Machine

Euisung Kim, Minnesota State University, Mankato

Monitoring - An Intervention to Improve Team Results in Software Engineering Education

Maira Marques

Pair Programming for Teaching Mobile Development

Mohammed Seyam

Community and Collaboration in an All-female Immersive Computer Science Program

Jeff Stern

Implementing K-Means Clustering and Collaborative Filtering to Enhance Sustainability of Project Repositories

Matthew Steuerer, The College of New Jersey

Web-based Visual Programming for Media Computation using Blockly

Jake Trower

An Evaluation of Cluster 3.0 as a General Tool for Principal Component Analysis

Alex Bender, Eastern Mennonite University

Detecting Insider Attacks with Video Websites using Distributed Image Steganalysis

Christopher Francis-Christie, Kennesaw State University

Programming by Voice to Support Hour of Code for Children with Motor Disabilities

Caitlin Hanley, University of Alabama

The Role of Chronology in Analyzing Introductory Programming Assignments

Kayla Holcomb, Abilene Christian University

Nevan Simone, Abilene Christian University

A Simple Line Game With Real-Time Visualization of the Internal Data Structure

John Huff

3D-Printed Animatronic Hand with Wireless Mirroring Glove and Precision Control

Cyrus Xiyuan Liu, Wake Forest University

Robotic Navigation Through Gesture Based Control

Nickolas McCarley

Advances in Phylogenetic-based Stemma Construction

Andrew Miller

Nathan Gould

Syntactic hint generation for Introductory Programming Problems

Aayush Mudgal,

Novel Logical Reasoning Tutor

Matthew Pfister

Loop Invariants: Learning to Help Teach

Caleb Priester

Mobile Security via Reverse Tether

Donna Young

THURSDAY 1:45 PM - 3:00 PM**Papers: Pair Programming (room: L11-L12)****Thu 1:45 PM - 3:00 PM**

- 1:45 PM Teaching Mobile Development with Pair Programming
Mohammed Seyam, Virginia Tech
D. Scott McCrickard, Virginia Tech
- 2:10 PM Observations of Pair Programming: Variations in Collaboration Across Demographic Groups
Omar Ruvalcaba, California State University, Northridge
Linda Werner, University of California, Santa Cruz
Jill Denner, Education, Training, and Research
- 2:35 PM Three Years of Student Pair Programming – Action Research Insights And Outcomes
Ian McChesney, Ulster University

Papers: Engagement and Diversity (room: L13-L14)**Thu 1:45 PM - 3:00 PM**

- 1:45 PM Enhancing Engagement by Blending Rigor and Relevance
Sarnath Ramnath, St Cloud state U
John Hoover, St Cloud state U
- 2:10 PM Understanding How Research Experiences for Undergraduate Students May Foster Diversity In The Professorate
Burcin Tamer, Computing Research Association
Jane Stout, Computing Research Association
- 2:35 PM Applying the Communal Goal Congruity Perspective to Enhance Diversity and Inclusion in Undergraduate Computing Degrees
Bo Brinkman, Miami University
Amanda Diekman, Miami University

Papers: CS Ed Research 1 (room: L5-L6)**Thu 1:45 PM - 3:00 PM**

- 1:45 PM An Effective Approach to Enhancing Compiler Error Messages
Brett A. Becker, University College Dublin
- 2:10 PM Automatic Inference of Programming Performance and Experience from Typing Patterns
Juho Leinonen, University of Helsinki
Krista Longi, University of Helsinki
Arto Klami, University of Helsinki
Arto Vihavainen, University of Helsinki

2:35 PM A (Updated) Review of Empiricism at the SIGCSE Technical Symposium
Ahmed Al-Zubidy, University of Alabama
Jeffrey Carver, University of Alabama
Sarah Heckman, North Carolina State University
Mark Sheriff, University of Virginia

Papers: CS0 (room: L2-L3)

Thu 1:45 PM - 3:00 PM

1:45 PM CS0 for Computer Science Majors at Ohio University
Cindy Marling, Ohio University
David Juedes, Ohio University

2:10 PM Security Injections 2.0: Increasing Ability to Apply Secure Coding Knowledge
using Segmented and Interactive Modules in CS0
Sagar Raina, Towson University
Siddharth Kaza, Towson University
Blair Taylor, Towson University

2:35 PM Combining “Big Data” and “Thick Data” Analyses for Understanding Youth
Learning Trajectories in a Summer Coding Camp
Deborah Fields, Utah State University
Lisa Quirke, University of Toronto
Janell Amely, Utah State University
Jason Maughan, Utah State University

Special Session (room: Cotton Row)

Thu 1:45 PM - 3:00 PM

Training Teachers to Integrate Computational Thinking into K-12 Teaching
Rania Hodhod, Columbus State University
Shamim Khan, Columbus State University
Yesem Kurt-Peker, Columbus State University
Lydia Ray, Columbus State University

Special Session (room: Steamboat)

Thu 1:45 PM - 3:00 PM

Demystifying Computing with Magic, part III
Daniel Garcia, UC Berkeley
David Ginat, Tel-Aviv University

Panel (room: Mississippi)

Thu 1:45 PM - 3:00 PM

Uncommon Teaching Languages
Mark Lewis, Trinity University
Douglas Blank, Bryn Mawr College
Kim Bruce, Pomona College
Peter-Michael Osera, Grinnell College

Supporter Session (room: Sultana)

Thu 1:45 PM - 3:00 PM

Google Supporter Session - Up Close and Personal with Google CS Programs

THURSDAY 3:00 PM - 3:45 PM
Break, Exhibits & Demos

Demos (room: Exhibit Hall)

Thu 3:00 PM - 3:45 PM

The Speech Recognition Virtual Kitchen Toolkit

Rebecca Bates, Minnesota State University, Mankato

Sung Kim, Minnesota State University, Mankato

The Sensorian Shield: Transforming the Raspberry Pi into an IoT Platform

Qusay Mahmoud, UOIT

Dhimiter Qendri, UOIT

Michael Lescisin, UOIT

NSF Showcase (room: Exhibit Hall)

Thu 3:00 PM - 4:30 PM

Bringing Real-World Data And Visualizations Into Data Structures Courses Using BRIDGES

Kalpathi Subramanian, UNC Charlotte

Jamie Payton, UNC Charlotte

David Burlinson, UNC Charlotte

Mihai Mehedint, UNC Charlotte

Software Tutors for Introductory Programming: Epplets, Codelets and Proplets

Amruth N. Kumar, Ramapo College of New Jersey

Customizable Visualizations for Introducing Database Concepts to Many Majors

Suzanne W. Dietrich, Arizona State Univ.

Don Goelman, Villanova Univ.

Transforming Computer Science Education Research Through Use of Appropriate Empirical

Research Methods: Mentoring and Tutorials

Jeffrey Carver, Univ. of Alabama

Sarah Heckman, NC State Univ.

Mark Sherriff, Univ. of Virginia

THURSDAY 3:45 PM - 5:00 PM**Papers: Big Data (room: L11-L12)****Thu 3:45 PM - 5:00 PM**

- 3:45 PM VisMap: Exploratory Visualization Support for Introductory Data Science and Visualization
Dugald Hutchings, Elon University
Megan Squire, Elon University
- 4:10 PM A Practical and Sustainable Model for Learning and Teaching Data Science
Bina Ramamurthy, University at Buffalo
- 4:35 PM Teaching Big Data with a Virtual Cluster
Joshua Eckroth, Stetson University

Papers: Teaching with Teams (room: L13-L14)**Thu 3:45 PM - 5:00 PM**

- 3:45 PM Teaching Global Software Engineering by Simulating a Global Project in the Classroom
Yang Li, Technische Universitaet Muenchen
Stephan Krusche, Technische Universitaet Muenchen
Christian Lescher, Technische Universitaet Muenchen
Bernd Bruegge, Technische Universitaet Muenchen
- 4:10 PM Evaluating Student Teams: Do Educators Know What Students Think?
Anya Tafliovich, University of Toronto Scarborough
Andrew Petersen, University of Toronto Mississauga
Jennifer Campbell, University of Toronto
- 4:35 PM Exploring Lightweight Teams in a Distributed Learning Environment
Stephen MacNeil, University of North Carolina at Charlotte
Celine Latulipe, University of North Carolina at Charlotte
Bruce Long, University of North Carolina at Charlotte
Aman Yadav, Michigan State University

Papers: Program Design (room: L5-L6)**Thu 3:45 PM - 5:00 PM**

- 3:45 PM Modernizing Plan-Composition Studies
Kathi Fisler, WPI
Shriram Krishnamurthi, Brown University
Janet Siegmund, Universität Passau
- 4:10 PM On the Interplay Between Bottom-Up and Datatype-Driven Program Design
Francisco Enrique Vicente Castro, Worcester Polytechnic Institute
Kathi Fisler, Worcester Polytechnic Institute

4:35 PM Can Students Design Software? The Answer Is More Complex Than You Think
Chenglie Hu, Carroll University

Papers: Scratch (room: L2-L3)

Thu 3:45 PM - 5:00 PM

3:45 PM ITCH: Individual Testing Of Computer Homework For Scratch Assignments
David Johnson, University of Utah

4:10 PM Multi-Track Programming Competitions with Scratch
Jason Arnold, Marquette University
Heather Bort, Marquette University
Ryan Naugle, Marquette University
Casey O'Hare, Marquette University
Dennis Brylow, Marquette University

4:35 PM Initialization in Scratch: Seeking Knowledge Transfer
Diana Franklin, University of Chicago
Charlotte Hill, University of California, Santa Barbara
Hilary Dwyer, University of California, Santa Barbara
Alexandria Hansen, University of California, Santa Barbara
Ashley Iveland, University of California, Santa Barbara
Danielle Harlow, University of California, Santa Barbara

Special Session (room: Cotton Row)

Thu 3:45 PM - 5:00 PM

Special Session: ACM Joint Task Force on Cybersecurity Education
Diana Burley, George Washington University
Matt Bishop, University of California, Davis
Elizabeth Hawthorne, Union County College
Siddharth Kaza, Towson University
Lynn Fatcher, Nelson Mandela Metropolitan University
Scott Buck, Intel

Panel (room: Steamboat)

Thu 3:45 PM - 5:00 PM

Technology We Can't Live Without!, revisited
Daniel Garcia, UC Berkeley
Leslie Aaronson, Forshay Learning Center
Shawn Kenner, Sharon High School
Colleen Lewis, Harvey Mudd College
Susan Rodger, Duke University

Panel (room: Mississippi)

Thu 3:45 PM - 5:00 PM

igniteCS: Addressing Undergraduate CS Retention

Erin Cannon, Google

Priya Chawla, University of Cincinnati

Katherine Lo, University of California, Irvine

Haley Adams, Rhodes College

Special Session (room: L10)

Thu 3:45 PM - 5:00 PM

Instructional Design is to Teaching as Software Engineering is to Programming

Austin Cory Bart, Virginia Tech

Clifford Shaffer, Virginia Tech

Supporter Session (room: Sultana)

Thu 3:45 PM - 5:00 PM

Oracle Supporter Session - Solve it with SQL - Use SQL to Solve a Mystery

THURSDAY 5:30 PM - 7:30 PM

Birds of a Feather Flock 1	Thu 5:30 PM - 6:20 PM
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Universal Access to Computing Education (room: Heritage 1, Sheraton)

Richard Ladner, University of Washington

Brianna Blaser, University of Washington

Andreas Stefik, University of Nevada Las Vegas

Daniela Marghitu, Auburn University

Updates to the ABET Computing Accreditation Criteria (room: Heritage 2, Sheraton)

Allen Parrish, The University of Alabama

Stan Thomas, Wake Forest University

Fostering Computational Creativity through Computing in the Arts: A Community of Educators
(room: Heritage 3, Sheraton)

Susan Reiser, UNC Asheville

Rebecca Bruce, UNC Asheville

Jennifer Burg, Wake Forest University

Bill Manaris, College of Charleston

Birds of Feather: Teaching with Alice (room: Heritage 4, Sheraton)

Donald Slater, Carnegie Mellon University

Wanda Dann, Carnegie Mellon University

Stephen Cooper, Stanford University

Small Department Initiative (room: St. Louis, Sheraton)

Cathy Bareiss, Olivet Nazarene University

Researching Programming Education with Blackbox (room: Natchez, Sheraton)

Neil Brown, University of Kent

Amjad Altadmri, University of Kent

Mentoring Student Teaching Assistants for Computer Science (room: Beale, Sheraton)

Charles Garrod, Carnegie Mellon University

Jeffrey Forbes, Duke University

Colleen Lewis, Harvey Mudd College

Peter-Michael Osera, Grinnell College

Practical Methods for Broadening Participation Through Student Engagement in CS1/CS2 Courses
(room: Memphis, Sheraton)

Beth Quinn, University of Colorado at Boulder

Alvaro Monge, California State University, Long Beach

Lecia Barker, University of Texas at Austin

Leo Porter, University of California, San Diego

Daniel Zingaro, University of Toronto, Mississauga

A Town Meeting: SIGCSE Committee on Expanding the Women-in-Computing Community (room:
Knoxville, Sheraton)

Gloria Townsend, DePauw University

SIGCSE Reads: Time for Book Discussion (room: Chattanooga, Sheraton)

Rebecca Bates, Minnesota State University, Mankato

Valerie Summet, Emory University

Teaching Track Faculty in CS (room: Jackson, Sheraton)

Mark Sherriff, University of Virginia

Dan Garcia, University of California, Berkeley

POGIL in Computer Science for Beginners and Experts (room: Oxford, Sheraton)

Chris Mayfield, James Madison University

Clif Kussmaul, Muhlenberg College

Saturnino Garcia, University of San Diego

Helen Hu, Westminster College

Tammy Pirmann, School District of Springfield Township

Preparing to Teach Humanitarian Open Source (room: Gatlinburg, Sheraton)

Heidi Ellis, Western New England University

Stoney Jackson, Western New England University

Gregory Hislop, Drexel University

S. Monisha Pulimood, The College of New Jersey

Gina Likins, Red Hat - University Outreach

CS Ed PhD Students Unite! (room: Azelea, Sheraton)

Briana Morrison, Georgia Institute of Technology

Jennifer Tsan, North Carolina State University

Rachel Harsley, University of Illinois at Chicago

Francisco Enrique Vicente Castro, Worcester Polytechnic Institute

Defining Concepts, Practices, and Standards for K-12 CS (room: L11-12, Convention Center)

Pat Yongpradit, Code.org

Industry Strength Tools for Software Engineering: What Works, What is OverKill? (room: L13-14, Convention Center)
Bonnie MacKellar, St John's University
Karen Jin, University of New Hampshire at Manchester

Birds of a Feather Flock 2

6:30 PM - 7:30 PM

How Do You Teach Debugging? Resources and Strategies for Better Student Debugging (room: Heritage 1, Sheraton)
Colleen Lewis, Harvey Mudd College
Chris Gregg, Tufts University

Teaching CS to Students of Color (room: Heritage 2, Sheraton)
Jakita Thomas, Spelman College
Shaundra Daily, University of Florida
Mikala Streeter, Mikala Streeter Preparatory School

Current Initiatives and Future Directions of the Computer Science Teachers Association (CSTA) (room: Heritage 3, Sheraton)
David Reed, Creighton University/CSTA
Mark Nelson, Computer Science Teachers Association (CSTA)

Web Programming (room: Heritage 4, Sheraton)
Marty Stepp, Stanford University
Allison Obourn, University of Washington
Jessica Wolk, Microsoft Research
Victoria Kirst, Google

Mathematical Reasoning in Computing Education: Connecting Math We Teach with Writing Correct Programs Birds-of-a-Feather (room: St. Louis, Sheraton)
John Dougherty, Haverford College
Joseph Hollingsworth, Indiana University Southeast
Joan Krone, Denison University
Murali Sitaraman, Clemson University

Exploring Learning Analytics for Computing Education (room: Natchez, Sheraton)
Chris Hundhausen, Washington State University
Adam Carter, Washington State University

Handling Very Large Lecture Courses: Keeping the Wheels on the Bus II (room: Beale, Sheraton)
Josh Hug, UC Berkeley
Daniel D. Garcia, UC Berkeley

Setting Quantifiable Goals for Broadening Participation in Computing (room: Memphis, Sheraton)
Kate Lockwood, University of St. Thomas
Maureen Doyle, Northern Kentucky University

Computer Science Summer Camps: Making Summer Programs Fun and Sustainable (room: Knoxville, Sheraton)
David Johnson, University of Utah, School of Computing

Leveraging CS Teachable Moments in the Maker Movement (room: Chattanooga, Sheraton)
Jennifer (Ginger) Alford, Trinity Valley School/Fort Worth Museum of Science and History
Erik Brunvand, University of Utah

Brainstorming Data Science as a Fluency Course for Non-Majors and as a New Specialization (room: Jackson, Sheraton)
Lillian Cassel, Villanova University
Don Goelman, Villanova University
Darina Dicheva, Winston Salem State University
Heikki Topi, Bentley University

Competency Based Education in Lower-Division Computer Science Taught at Community Colleges (room: Oxford, Sheraton)
Amardeep Kahlon, Austin Community College
Linda Smarzik, Austin Community College
Mary Kohls, Austin Community College

Assessment of Security Knowledge, Skills and Abilities using Hands-On Exercises in 2016 (room: Gatlinburg, Sheraton)
Richard Weiss, The Evergreen State College
Jens Mache, Lewis & Clark College
Michael Locasto, University of Calgary
Blair Taylor, Towson University
Siddharth Kaza, Towson University
Ambareen Siraj, Tennessee Tech University
Elizabeth Hawthorne, Union County College

Student ICTD Research and Service Learning Abroad (room: Azelea, Sheraton)
Joseph Mertz, Carnegie Mellon University

Increasing Programming Contest Participation for Fun and Profit (room: L11-12, Convention Center)
Aaron Bloomfield, University of Virginia
Borja Sotomayor, University of Chicago

Providing Impactful Professional Development Teachers Can Implement (room: L13-14,
Convention Center)
Kathy Menchaca Isbister, Stanford University

THURSDAY 7:30 PM - 9:30 PM
Reception (room: Ballroom A)

FRIDAY 8:30 AM - 10:00 AM

Plenary Session - SIGCSE Award for Outstanding Contribution to Computer Science Education - Jan Cuny - National Science Foundation

FRIDAY 10:00 AM - 10:45 AM

Break, Exhibits & Demos

Demos (room: Exhibit Hall)

Fri 10:00 AM - 10:45 AM

Creating and Grading IPython/Jupyter Notebook Assignments with NbGrader

Jessica Hamrick, University of California, Berkeley

CodeSnaps: Block-Based Robotic Programming for the Low-Budget Classroom

Jennifer Sabourin, SAS Institute, Inc

Lucy Kosturko, SAS Institute, Inc

Scott McQuiggan, SAS Institute, Inc

NSF Showcase (room: Exhibit Hall)

Fri 10:00 AM - 11:30 AM

Integrating Mobile Computing and Security into a Computer Science Curriculum

Xiaohong Yuan, NC A&T Univ.

Kenneth Williams, NC A&T Univ.

Jinsheng Xu, NC A&T Univ.

Kelvin Bryant, NC A&T Univ.

CS1: Creative Computation in the Context of Art and Visual Media

Dianna Xu, Bryn Mawr College

Ira Greenberg, Southern Methodist Univ.

Deepak Kumar, Bryn Mawr College

Aaron Cadle, Fort Worth Country Day School

Ursula Wolz, RiverSound Solutions

Collaborative Education: Building a Skilled Software Verification and Validation User Community

Sushil Acharya, Robert Morris Univ.

Priyadarshan Manohar, Robert Morris Univ.

Peter Wu, Robert Morris Univ.

Supporting Student Learning in Humanitarian Free and Open Source Software (HFOSS) Projects

Heidi J. C. Ellis, Western New England Univ.

Darci Burdge, Nassau Community College

Gregory W. Hislop, Drexel Univ.

FRIDAY 10:45 AM - 12:00 PM**Papers: Peer Techniques (room: L11-L12)****Fri 10:45 AM - 12:00 PM**

- 10:45 AM Differences in the Learning Principles Dominating Student-Student vs. Student-Instructor Interactions while Working on Programming Tasks
Alessio Gaspar, University of South Florida
Joni Torsella, University of Cincinnati
Nora Honken, University of Cincinnati
Sohum Sohoni, Arizona State University
Colin Arnold, University of South Florida
- 11:10 AM The Effects of Peer- and Self-assessment on the Assessors
Joonsuk Park, Cornell University
Kimberley Williams, Cornell University
- 11:35 AM The Sweep: Essential Examples for In-Flow Peer Review
Joe Gibbs Politz, Brown University
Joseph Collard, UMass Amherst
Arjun Guha, UMass Amherst
Kathi Fisler, Worcester Polytechnic Institute
Shriram Krishnamurthi, Brown University

Papers: Artistic Approaches (room: L13-L14)**Fri 10:45 AM - 12:00 PM**

- 10:45 AM The MoveLab: Developing Congruence Between Students' Self-Concepts and Computing
Kayla DesPortes, Georgia Institute of Technology
Monet Spells, Georgia Institute of Technology
Betsy DiSalvo, Georgia Institute of Technology
- 11:10 AM Creative Computation in High School
Dianna Xu, Bryn Mawr College
Aaron Cadle, Fort Worth Country Day School
Darby Thompson, Sidwell Friends School
Ursula Wolz, RiverSound Solutions
Ira Greenberg, Southern Methodist University
Deepak Kumar, Bryn Mawr College
- 11:35 AM Computational Art - Introducing High School Students to Computing via Art
Zoe Wood, California Polytechnic State University
Paul Muhl, Santa Barbara High School
Katelyn Hicks, California Polytechnic State University

Papers: Tests and Outcomes (room: L5-L6)	Fri 10:45 AM - 12:00 PM
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| 10:45 AM | <p>Introducing and Evaluating Exam Wrappers in CS2
 <i>Michelle Craig, University of Toronto</i>
 <i>Diane Horton, University of Toronto</i>
 <i>Daniel Zingaro, University of Toronto Mississauga</i>
 <i>Danny Heap, University of Toronto</i></p> |
| 11:10 AM | <p>Measuring Effects of Modality on Perceived Test Anxiety for Computer Programming Exams
 <i>Robert Deloatch, University of Illinois Urbana Champaign</i>
 <i>Brian Bailey, University of Illinois Urbana Champaign</i>
 <i>Alex Kirlik, University of Illinois Urbana Champaign</i></p> |
| 11:35 AM | <p>Impact of Student Achievement Goals on CS1 Outcomes
 <i>Daniel Zingaro, University of Toronto Mississauga</i>
 <i>Leo Porter, University of California, San Diego</i></p> |

Papers: High School Diversity (room: L2-L3)	Fri 10:45 AM - 12:00 PM
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| 10:45 AM | <p>Towards More Gender Diversity in CS through an Artificial Intelligence Summer Program for High School Girls
 <i>Marie Vachovsky, Stanford University</i>
 <i>Grace Wu, Stanford University</i>
 <i>Sorathan Chaturapruek, Stanford University</i>
 <i>Olga Russakovsky, Stanford University</i>
 <i>Richard Sommer, Stanford University</i>
 <i>Li Fei-Fei, Stanford University</i></p> |
| 11:10 AM | <p>Investigating the Role of Being a Mentor as a Way of Increasing Interest in Computer Science
 <i>Jody Clarke-Midura, Utah State University</i>
 <i>Vicki Allan, Utah State University</i>
 <i>Kevin Close, Utah State University</i></p> |
| 11:35 AM | <p>Sisters Rise Up 4 CS: Helping Female Students Pass the Advanced Placement Computer Science A Exam
 <i>Barbara Ericson, Georgia Institute of Technology</i>
 <i>Miranda Parker, Georgia Institute of Technology</i>
 <i>Shelly Engelman, SageFox Consulting Group</i></p> |

Panel (room: Cotton Row)

Fri 10:45 AM - 12:00 PM

Future Directions of Block-based Programming

Neil Brown, University of Kent

Jens Mönig, SAP Labs

Anthony Bau, Phillips Exeter Academy

David Weintrop, Northwestern University

Panel (room: Steamboat)

Fri 10:45 AM - 12:00 PM

Why Don't Some CS0 Students Succeed? How Important Are Background, Experience, Culture, Aptitude, Habits and Attitude?

Daniel Garcia, University of California, Berkeley

Stuart Reges, University of Washington

Colleen Lewis, Harvey Mudd College

Nathan Ensmenger, Indiana University

Panel (room: Mississippi)

Fri 10:45 AM - 12:00 PM

Scrum and Agile Methods in Software Engineering Courses

Jennifer Campbell, University of Toronto

Stan Kurkovsky, Central Connecticut State University

Chun Wai Liew, Lafayette College

Anya Tafliovich, University of Toronto Scarborough

Panel (room: L10)

Fri 10:45 AM - 12:00 PM

How to Use Open Source Software in Education

Judith Bishop, Microsoft Research

Carlos Jensen, Oregon State University

Walt Scacchi, University of California

Arfon Smith, GitHub Inc

Supporter Session (room: Sultana)

Fri 10:45 AM - 12:00 PM

Vocareum Supporter Session - Assessment at scale: The next frontier for universal computing literacy

Posters (room: Exhibit Hall)

Fri 10:45 AM - 12:00 PM

Integrating Sustainability Concepts into Introductory Programming Courses

Jeffrey Stone, Penn State University

The Development of Internationalized Computational Thinking Curriculum in Hong Kong Primary Education

Gary K. W. Wong, The Hong Kong Institute of Education

Kening Zhu, City University of Hong Kong

Xiaojuan Ma, The Hong Kong University of Science and Technology

John Huen, Koding Kingdom

FunWithSound: A Music Composition and Synthesis Library for Processing

David Hovemeyer, York College of Pennsylvania

Exploring Computer Science in the Liberal Arts

Gary Skuse, Rochester Institute of Technology

Daniel Walzer, University of Massachusetts at Lowell

A Holistic Sequence of Programming Assignments for CS2

Joanna Klukowska, Courant Institute of Mathematical Sciences, New York University

Stewart Weiss, Hunter College of the City University of New York

Combating Perceptions of Computer Scientists: A Short-term Intervention

Shaundra Daily, University of Florida

Alison Leonard, Clemson University

Sophie Jörg, Clemson University

Sabarish Babu, Clemson University

Nikeetha Dsouza, Clemson University

Dhaval Parmar, Clemson University

Kara Gundersen, University of Florida

Joseph Isaac, Clemson University

Coding, Designing, and Logistics; How Modes Affect Equity In Computer Science Education

Declan McClintock, Michigan State University

Niral Shah, Michigan State University

Lights, Camera, but no Action: Exploring Affective Audio-Visual Features of Educational Videos

Abhay Doke, Tata Research Development and Design Centre

Niranjan Pedanekar, Tata Research Development and Design Centre

Increasing security awareness in undergraduate courses with labware

Michael Weeks, Department of Computer Science, Georgia State University

Yi Pan, Department of Computer Science, Georgia State University

Yanqing Zhang, Department of Computer Science, Georgia State University

Visualizing Algorithm Analysis Topics

Mohammed Farghally, Virginia Tech

Eric Fouh, Lehigh University

Sally Hamouda, Virginia Tech

Kyu Han Koh, Virginia Tech

Clifford Shaffer, Virginia Tech

The Impact on Student Learning and Satisfaction When a CS2 Course Became Interactive

Steven Huss-Lederman, Beloit College

A Certification-Guided Course for Cloud Computing

Dahai Guo, Florida Gulf Coast University

Anna Koufakou, Florida Gulf Coast University

Automated Analysis of Student Programmer Coding Behavior Patterns

Clinton Staley, California Polytechnic State University, SLO

Corey Ford, California Polytechnic State University, SLO

SPOCK – A System for Encouraging Interaction in Small Private Online Courses

Ryan Hardt, University of Wisconsin-Eau Claire

Grant Wuerker, University of Wisconsin-Eau Claire

Broadening the Path to Cybersecurity Profession in Predominantly Undergraduate and Liberal Arts Institutions

Xenia Mountroudou, Wofford College

Xiangyang Li, Johns Hopkins University

Leveraging Context to Create Opportunistic Co-Located Learning Environments

Stephen MacNeil, University of North Carolina at Charlotte

Celine Latulipe, University of North Carolina at Charlotte

Student Perceptions of Success in Computer Science Senior Capstone Projects

Rick Parker, University of Colorado at Boulder

Using Small Whiteboards to Engage Students in Active Learning

Victor Norman, Calvin College

Serita Nelesen, Calvin College

Design and Evaluation of a Course Module on Android Cipher Programming

Jinsheng Xu, North Carolina A&T State University

Xiaohong Yuan, North Carolina A&T State University

Ashrith Velma, North Carolina A&T State University

Building Pre-Service Teacher Interest in Computer Science Education through Mentoring
Experiences

Kim Huett, University of West Georgia

Mary Alice Varga, University of West Georgia

Computing with a Community Focus: An App Inventor Summer Camp for Middle School Students

Lijun Ni, University of Massachusetts Lowell

Mark Sherman, University of Massachusetts Lowell

Diane Schilder, Evaluation Analysis Solutions

Fred Martin, University of Massachusetts Lowell

Exploring gamification to teach computer science to non-computer science related major

Lorena Martinez-Elizalde, ITESM

Monica Duarte-Dominguez, ITESM

Using Learning Analytics to Trace Academic Trajectories of CS and IT Students to Better
Understanding Successful Pathways to Graduation

Huzefa Rangwala, George Mason University

Omaima Almatrafi, George Mason University

Aditya Johri, George Mason University

Jaime Lester, George Mason University

Promote Self-efficacy in Learning of Mobile App and Security with Real-World Relevant
Laboratory

Kai Qian, Kennesaw State University

Dan Lo, Kennesaw State university

Data Science for All: An Introductory Course for Non-Majors, in Flipped Format

Lillian Cassel, Villanova University

Darina Dicheva, Winston Salem State University

Christo Dichev, Winston Salem State University

Don Goelman, Villanova University

Michael Posner, Villanova University

FRIDAY 12:00 PM - 1:45 PM

LUNCH: on your own

FRIDAY 1:45 PM - 3:00 PM**Papers: Problem Solving (room: L11-L12)****Fri 1:45 PM - 3:00 PM**

- 1:45 PM Online CS1: Who Enrols, Why, and How Do They Do?
Diane Horton, University of Toronto
Jennifer Campbell, University of Toronto
Michelle Craig, University of Toronto
- 2:10 PM The Influence of Problem Solving Abilities on Students' Performance on Different Assessment Tasks in CS1.
Alex Lishinski, Michigan State University
Aman Yadav, Michigan State University
Richard Enbody, Michigan State University
Jonathon Good, Michigan State University
- 2:35 PM A Course on Programming and Problem Solving
Swapneel Sheth, University of Pennsylvania
Christian Murphy, University of Pennsylvania
Kenneth Ross, Columbia University
Dennis Shasha, New York University

Papers: Novel Learning Approaches (room: L13-L14)**Fri 1:45 PM - 3:00 PM**

- 1:45 PM The Video Collaboratory as a Learning Environment
Vikash Singh, University of North Carolina at Charlotte
Sarah Abdellahi, University of North Carolina at Charlotte
Mary Lou Maher, University of North Carolina at Charlotte
Celine Latulipe, University of North Carolina at Charlotte
- 2:10 PM Just-In-Time Learning for the Just Google It Era
Elizabeth Boese Boese, University of Colorado - Boulder
- 2:35 PM Hackathons as an Informal Learning Platform
Arnab Nandi, The Ohio State University
Meris Mandernach, The Ohio State University

Papers: CS Ed Research 2 (room: L5-L6)	Fri 1:45 PM - 3:00 PM
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1:45 PM	<p>A Multi-institutional Study of Peer Instruction in Introductory Computing</p> <p><i>Leo Porter, University of California, San Diego</i></p> <p><i>Dennis Bouvier, Southern Illinois Univ.~Edwardsville</i></p> <p><i>Quentin Cutts, University of Glasgow</i></p> <p><i>Scott Grissom, Grand Valley State University</i></p> <p><i>Cynthia Lee, Stanford University</i></p> <p><i>Robert McCartney, University of Connecticut</i></p> <p><i>Daniel Zingaro, University of Toronto, Mississauga</i></p> <p><i>Beth Simon, University of California, San Diego</i></p>
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2:10 PM	<p>Development of a Concept Inventory for Computer Science Introductory Programming</p> <p><i>Ricardo Caceffo, UNICAMP</i></p> <p><i>Steven Wolfman, University of British Columbia</i></p> <p><i>Kellogg Booth, University of British Columbia</i></p> <p><i>Rodolfo Azevedo, UNICAMP</i></p>
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2:35 PM	<p>A data-driven analysis of informatively hard concepts in introductory programming</p> <p><i>Rudolf Wiegand, University of Central Florida</i></p> <p><i>Anthony Bucci, Independent Contractor</i></p> <p><i>Amruth Kumar, Ramapo College of New Jersey</i></p> <p><i>Jennifer Albert, The Citadel</i></p> <p><i>Alessio Gaspar, University of South Florida</i></p>
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Papers: K-8 Diversity (room: L2-L3)	Fri 1:45 PM - 3:00 PM
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1:45 PM	<p>How Early Does the CS Gender Gap Emerge? A Study of Collaborative Problem Solving in 5th Grade Computer Science</p> <p><i>Jennifer Tsan, North Carolina State University</i></p> <p><i>Kristy Boyer, University of Florida</i></p> <p><i>Collin Lynch, North Carolina State University</i></p>
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2:10 PM	<p>Differentiating for Diversity: Using Universal Design for Learning in Computer Science Education</p> <p><i>Alexandria Hansen, University of California, Santa Barbara</i></p> <p><i>Eric Hansen, Hope Elementary School, Santa Barbara</i></p> <p><i>Hilary Dwyer, University of California, Santa Barbara</i></p> <p><i>Danielle Harlow, University of California, Santa Barbara</i></p> <p><i>Diana Franklin, University of Chicago</i></p>
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2:35 PM Empowering All Students: Closing the CS Confidence Gap with an In-School Intervention for Middle School Students
Philip Buffum, North Carolina State University
Megan Frankosky, North Carolina State University
Kristy Boyer, University of Florida
Eric Wiebe, North Carolina State University
Bradford Mott, North Carolina State University
James Lester, North Carolina State University

Special Session (room: Cotton Row)

Fri 1:45 PM - 3:00 PM

AP Computer Science and Service Learning with We.org
Lien Diaz, College Board
Sandy Czajka, Riverside Brookfield High School
Crystal Furman, College Board

Panel (room: Steamboat)

Fri 1:45 PM - 3:00 PM

CS10K Teachers by 2017? Try CS1K+ students NOW! Coping with the Largest CS1 Courses in History
Daniel Garcia, UC Berkeley
Jennifer Campbell, University of Toronto
John DeNero, UC Berkeley
Mary Lou Dorf, University of Michigan
Stuart Reges, University of Washington

Special Session (room: Mississippi)

Fri 1:45 PM - 3:00 PM

Updating Curricular Guidelines for Associate-Degree Computer Science Programs
Cara Tang, Portland Community College
Cindy Tucker, Bluegrass Community and Technical College
Elizabeth Hawthorne, Union County College

Supporter Session (room: Sultana)

Fri 1:45 PM - 3:00 PM

Google Supporter Session - Surfacing Solutions to the Capacity Crunch

FRIDAY 3:00 PM - 3:45 PM
Break, Exhibits & Demos

Demos (room: Exhibit Hall)

Fri 3:00 PM - 3:45 PM

OnRamp to Parallel and Distributed Computing: Web-portal for teaching parallel and distributed computing

Samantha Foley, University of Wisconsin-La Crosse

Joshua Hursey, University of Wisconsin-La Crosse

Education Modules for Networking, Cloud Computing and Security in Systems Courses

Jay Aikat, UNC - Chapel Hill

Michael Reiter, UNC - Chapel Hill

Kevin Jeffay, UNC - Chapel Hill

NSF Showcase (room: Exhibit Hall)

Fri 3:00 PM - 4:30 PM

Increasing Retention in Engineering and Computer Science with a Focus on At-Risk First Year and Sophomore Students

Tammy VanDeGrift, Univ. of Portland

Bolstering Security Education in Browser Security

Wenliang Du, Syracuse Univ.

Li Yang, UT Chattanooga

Xiaohong Yuan, NC A&T Univ.

On Beyond Sudoku: Pencil Puzzles as an Engaging Problem Domain for Intro CS

Zack Butler, Rochester Institute of Technology

Ivona Bezakova, Rochester Institute of Technology

Computational Creativity to Improve CS Education

Leen-Kiat Soh, University of Nebraska

Duane Shell, University of Nebraska

FRIDAY 3:45 PM - 5:00 PM

Papers: Databases (room: L11-L12)

Fri 3:45 PM - 5:00 PM

- 3:45 PM Students' syntactic mistakes in writing seven different types of SQL queries and its application to predicting students' success
Alireza Ahadi, University of Technology Sydney
Vahid Behbood, University of Technology Sydney
Julia Prior, University of Technology Sydney
Arto Vihavainen, University of Helsinki
Raymond Lister, University of Technology Sydney

Fri 3:45 PM - 5:00 PM

- 4:10 PM chidb: Building a Simple Relational Database System from Scratch
Borja Sotomayor, University of Chicago - Department of Computer Science
Adam Shaw, University of Chicago - Department of Computer Science
- 4:35 PM SQL: From Traditional Databases to Big Data
Yasin Silva, Arizona State University
Isadora Almeida, Arizona State University
Michell Queiroz, Arizona State University

Papers: International Perspectives (room: L13-L14)

Fri 3:45 PM - 5:00 PM

- 3:45 PM The Performance of Female Computer Science Students across Three Caribbean Islands
Daniel Fokum, The University of the West Indies, Mona
Daniel Coore, The University of the West Indies, Mona
Yewande Lewis-Fokum, The University of the West Indies, Mona
- 4:10 PM Piloting Computer Science Education Week in Mexico
Nora Escherle, Ph FHNW
Silvia I. Ramirez-Ramirez, Department of Computer Science, Tecnológico de Monterrey
Ashok Basawapatna, Dept. Mathematics, Computer & Information Science, SUNY, Old Westbury
Dorit Assaf, School of Education, FHNW
Alexander Repenning, School of Education, FHNW
Carmine Maiello, School of Education, FHNW
Yasko Endo, University of Colorado, Boulder
Juan Nolasco-Flores, Department of Computer Science, Tecnológico de Monterrey

4:35 PM Alice in the Middle East: An experience report from the formative phase
Saquib Razak, Carnegie Mellon University
Huda Gedawy, Carnegie Mellon University
Wanda Dann, Carnegie Mellon University
Donald Slater, Carnegie Mellon University

Papers: Software Testing (room: L5-L6)

Fri 3:45 PM - 5:00 PM

3:45 PM Testing Strategies for the Automated Grading of Student Programs
Chris Wilcox, Colorado State University

4:10 PM A strategy to combine test-driven development and test criteria to improve learning of programming skills
Bruno Henrique Pachulski Camara, Faculdade Integrado, Federal University of Technology - Paraná
Marco Aurélio Graciotto Silva, Federal University of Technology - Paraná

4:35 PM Tool Design and Student Testing Behavior in an Introductory Java Course
Grant Braught, Dickinson College
James Midkiff, Dickinson College

Papers: CS Principles (room: L2-L3)

Fri 3:45 PM - 5:00 PM

3:45 PM An Experience Report Assessing A Professional Development MOOC For CS Principles
Jeff Gray, The University of Alabama
Jonathan Corley, The University of Alabama
Brian Eddy, University of West Florida

4:10 PM Two Teachers, Two Perspectives on CS Principles
Jean Griffin, Temple University
Tammy Pirmann, Gwynedd Mercy University
Brent Gray, Carver Engineering and Science High School

4:35 PM Lessons Learned from "BJC" CS Principles Professional Development
Thomas W. Price, NC State University
Veronica Catete, NC State University
Jennifer Albert, The Citadel
Tiffany Barnes, NC State University
Daniel D. Garcia, UC Berkeley

Papers: Beale St. Sampler (room: Cotton Row)

Fri 3:45 PM - 5:00 PM

3:45 PM A Survey of Ethical Agreements in Information Security Courses
Benedict Chukuka, University of Calgary
Michael Locasto, University of Calgary

- 4:10 PM Assessing the Tier-1 Core Learning Outcomes of CS2013
James McGuffee, Northern Kentucky University
E, Palmer, MacMurray College
Indira Guzman, Trident University International
- 4:35 PM Seeing Is Believing: Helping Students Visualize Multithreaded Behavior
Joel Adams, Calvin College
Patrick Crain, Calvin College
Christopher Dilley, Calvin College
Serita Nelesen, Calvin College
Javin Unger, Calvin College
Mark Vander Stel, Calvin College

Panel (room: Steamboat)	Fri 3:45 PM - 5:00 PM
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- Booming Enrollments – Survey Data
Tracy Camp, Colorado School of Mines
Stu Zweben, The Ohio State University
Duncan Buell, University of South Carolina
Jane Stout, Computing Research Association

Panel (room: Mississippi)	Fri 3:45 PM - 5:00 PM
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- Panel: Engage in Reasoning with Tools
Greg Kulczycki, Virginia Tech
Murali Sitaraman, Clemson University
Nigamanth Sridhar, Cleveland State University
Bruce Weide, The Ohio State University

Supporter Session (room: River Bluff)	Fri 3:45 PM - 5:00 PM
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- Turing's Craft Supporter Session - Creating Exercises and Engaging With Students

Lightning Talks (room: L10)	Fri 3:45 PM - 5:00 PM
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- Computational Making: What Does this Theory Mean for SIGCSE?
Jennifer Rode, Drexel University
Andrea Marshall, Drexel University
Houda El Mimouni, Drexel University
Jennifer Booker, Drexel University

- Complexity Tutor: developing an interactive tutoring system for computational complexity
Mark McCartin-Lim, University of Massachusetts Amherst

A Body of Knowledge for Usable Security and Privacy Education

Yousra Javed, UNC Charlotte

Heather Richter Lipford, UNC Charlotte

U.S Army's Cyber Leader Development Program

James Finocchiaro, Army Cyber Institute at West Point, NY

Using Instant Chat for Fun and for Profit to Run a Large Class

Michael Ball, UC Berkeley

Crossing the Streams: Exploring the Interplay between Students' Online Social Activity and Programming Behavior

Adam Carter, Washington State University

Christopher Hundhausen, Washington State University

Social Network Analysis as a Tool for Understanding Student Interaction in Project-based Courses

Bonnie MacKellar, St John's University

Enhancing teaching of Big Data by using real world datasets

Anurag Nagar, University of Texas at Dallas

Raising the Awareness of Accessibility Needs in Block Languages

Amber Wagner, Kennesaw State University

Jeff Gray, University of Alabama

Daniela Marghitu, Auburn University

Andreas Stefik, University of Nevada, Las Vegas

Study Support Eliminates the Negative Impact of Gender Stereotypes on Women's Self-Concept

Jane Stout, Computing Research Association

Burcin Tamer, Computing Research Association

A "Grand Tour" of Computer Science: Re-Designing CS1 for Breadth and Retention

Natalie Linnell, Santa Clara University

Nicholas Tran, Santa Clara University

You wouldn't know it from SIGCSE proceedings, but we don't only teach CS1

Colleen Lewis, Harvey Mudd College

Poster Session (room: Exhibit Hall)

Fri 3:45 PM - 5:00 PM

Combining Flipped Learning with Gamification to Improve Student Performance in a Data Structures Course

Darina Dicheva, Winston Salem State University

Assessing the Effectiveness of Experiential-Learning-Based Teaching Tools in Cybersecurity Courses

Xiaohong Yuan, North Carolina A&T State University

Jinsheng Xu, North Carolina A&T State University

Huiming Yu, North Carolina A&T State University

Junghee Kim, North Carolina A&T State University

Taehee Kim, North Carolina A&T State University

Teaching and Learning in an Introductory Undergraduate Programming Class: A Reflective Autoethnography

S. Zahra Atiq, Purdue University, West Lafayette

18 hours of code with 5th grade students

Katie Davis, California Polytechnic State University – San Luis Obispo

John Wilcox, Peabody Charter School

Zoë Wood, California Polytechnic State University – San Luis Obispo

Multifaceted Efforts to Create an Inclusive Environment and Increase Diversity

Perry Fizzano, Western Washington University

David Hartenstine, Western Washington University

Clashroom: A Game to Enhance the Classroom Experience

Shannon Duvall, Elon University

Dan Eagle, Credit Karma

Riese Narcisse, Credit Suisse

Thomas Price, NC State University

Deepening Learning in High School Computer Science through Practices from the NGSS

Marie Bienkowski, SRI International

Replicating a Validated CS1 Assessment

Miranda Parker, Georgia Institute of Technology

Mark Guzdial, Georgia Institute of Technology

Assessing the Development of Computer Science Pedagogical Content Knowledge in the TEALS Program

Yvonne Kao, WestEd

Leigh Ann DeLyser, CSNYC

Aleata Hubbard, WestEd

A Curiosity-Driven System for Developing Coding Literacy

Neeraj Chatlani, Rollins College

Daniel Myers, Rollins College

Teaching Software Engineering Skills in CS1.5: Incorporating Real-world Practices and Tools
Sarah Heckman, NC State University
Jason King, NC State University

Designing and Refining of Questions to Assess Students' Ability to Mentally Simulate Programs
and Predict Program Behavior
Ashish Aggarwal, University of Florida
Christina McCune, University of Florida
David Touretzky, Carnegie Mellon University

Megas and Gigas Educate (MaGE): A Curricular Peer Mentoring Program
Heather Pon-Barry, Mount Holyoke College
Audrey St. John, Mount Holyoke College
Becky Packard, Mount Holyoke College
Barbara Rotundo, Mount Holyoke College

Pixels, Post-It's® and CS Principles
Jeffrey Popyack, Drexel University
William Mongan, Drexel University

Adventures in K-5 STEM Outreach Using the NAO Robot
Steven Hadfield, United States Air Force Academy
Christopher Coulston, Pennsylvania State University - Erie
Marissa Hadfield, Academy School District 20
Lillian Warner, United States Air Force Academy

Engaging School Counselors, Creating Computing Allies
Sarah Hug, University of Colorado, Boulder
Jane Krauss, NCWIT

OnRamp to Parallel and Distributed Computing
Samantha Foley, University of Wisconsin-La Crosse
Joshua Hursey, University of Wisconsin-La Crosse

Teaching Computational Thinking Through Bio-Design
Johanna Okerlund, UNC at Charlotte
Orit Shaer, Wellesley College
Celine Latulipe, UNC at Charlotte

User Experience/Feedback - Rensselaer Polytechnic Institute Homework Submission Server

Andrea Wong, Rensselaer Polytechnic Institute
Eric Tran, Rensselaer Polytechnic Institute
Joe Jung, Rensselaer Polytechnic Institute
Marina Espinoza, Rensselaer Polytechnic Institute
Ben Shaw, Rensselaer Polytechnic Institute
Beverly Sihsobhon, Rensselaer Polytechnic Institute
Melissa Lindquist, Rensselaer Polytechnic Institute
Samuel Breese, Rensselaer Polytechnic Institute
Matthew Peveler, Rensselaer Polytechnic Institute
Barbara Cutler, Rensselaer Polytechnic Institute

Guiding Career Development Prior to Capstone Experiences

Deborah Knox, The College of New Jersey

Autograding and Feedback for Snap!, a visual programming language

Michael Ball, UC Berkeley
Daniel Garcia, UC Berkeley

Bigger Isn't Better When It Comes to Online Computer Science Teacher Communities

Mackenzie Leake, Stanford University
Colleen Lewis, Harvey Mudd College

The Sol y Agua Project: Enhancing Middle School Education through Computing with an Emphasis on Simulation and Data Science

Ann Gates, University of Texas at El Paso
Mary Roy, University of Texas at El Paso
Monika Akbar, University of Texas at El Paso
Florencia Larsen, Cyber-ShARE Center, University of Texas at El Paso
Ivonne Lopez, Cyber-ShARE Center, University of Texas at El Paso
Christian Murga, Cyber-ShARE Center, University of Texas at El Paso
Angel Ortega, Cyber-ShARE Center, University of Texas at El Paso
Jesus Tellez, Cyber-ShARE Center, University of Texas at El Paso
Rebecca Urbina, Cyber-ShARE Center, University of Texas at El Paso

We Have Questions: Pedagogical, Technical, and Procedural Assistance Requests in a Large Computational Thinking Curriculum Research Project

Hilarie Nickerson, University of Colorado - Boulder
Jeffrey Bush, University of Colorado - Boulder
Yasko Endo, University of Colorado - Boulder

An Expert System for the Prediction of Student Performance in an Initial Computer Science Course

Michael Kuehn, University of North Dakota

Jarred Estad, University of North Dakota

Jeremy Straub, University of North Dakota

Tom Stokke, University of North Dakota

A web-based environment for developing and utilizing teaching languages for novice computer science students

Benjamin Kruger, Northeastern State University

Richard Matzen, Northeastern State University

FRIDAY 5:10 PM - 6:00 PM
SIGCSE Business Meeting (room: Cotton Row)

FRIDAY 6:00 PM - 7:00 PM
NCWIT Reception (room: Heritage Ballroom, Sheraton)

FRIDAY 6:00 PM - 8:00 PM
CCECC Reception (room: Nashville, Sheraton)

Fri 6:00 PM - 8:00 PM

FRIDAY 6:10 PM - 7:00 PM
CCSC Business Meeting (room: Cotton Row)

FRIDAY 7:00 PM - 10:00 PM
Workshops

Workshop #301: A Hands-On Introduction to the Internet of Things (room: L1)

Bill Siever, Western Illinois University

Michael Rogers, Northwest Missouri State University

Workshop #302: Introducing Secure Coding in CS0, CS1, and CS2 (room: L2-L3)

Blair Taylor, Towson University

Siddharth Kaza, Towson University

Workshop #303: Building on Blocks: Getting Started With Frames in Greenfoot 3 (room: L5-L6)

Amjad Altadmri, University of Kent

Neil Brown, University of Kent

Workshop #304: Rubricking Like a Boss: Writing and Using Rubrics for Faster, Fairer Grading of Student Programs (room: L8)

Don Blaheta, Longwood University

Adrienne Decker, Rochester Institute of Technology

Workshop #305: Permeating Data Visualization in CS Courses (room: L9)

Aaron Cadle, Fort Worth Country Day School

Ira Greenberg, Southern Methodist University

Deepak Kumar, Bryn Mawr College

Dianna Xu, Bryn Mawr College

Ursula Wolz, RiverSound Solutions

Workshop #306: Learn CS1/2 by Playing and Building Commercial Grade Casual Games: No Background Required (room: L10)

Kelvin Sung, University of Washington Bothell

Rob Nash, University of Washington Bothell

Jason Pace, University of Washington Bothell

Workshop #307: CSinParallel: Using WebMapReduce to teach parallel computing concepts, hands-on (room: L11-L12)

Richard Brown Brown, St. Olaf College

Elizabeth Shoop, Macalester College

Joel Adams, Calvin College

Workshop #308: MUzECS: Block-based Arduino Programming for Exploring Computer Science (room: L13-L14)

Dennis Brylow, Marquette University

Workshop #309: How to Plan and Run Summer Computing Camps - Logistics (room: River Bluff)

Barbara Ericson, Georgia Institute of Technology

Kristine Nagel, Georgia Gwinnett College

Nannette Napier, Georgia Gwinnett College

Krishnendu Roy, Valdosta State University

Workshop #310: K-12 Teacher Support for Computer Science Principles: An Introduction to the UTeach Course, Thriving in Our Digital World: AP (room: Sultana)

Jeff Mickel, The UTeach Institute, The University of Texas at Austin

Alicia Beth, The UTeach Institute, The University of Texas at Austin

Workshop #311: Conducting educational research in the computer science classroom: Choosing the appropriate research design to address your research questions. (room: Mississippi)

Aman Yadav, Michigan State University

Workshop #312: AP CS Principles and The Beauty and Joy of Computing Curriculum (room: Cotton Row)

Daniel Garcia, UC Berkeley

Tiffany Barnes, NC State

Michael Ball, UC Berkeley

Emil Biga, Millard North High School

Josh Paley, Gunn High School

Marnie Hill, J. H. Rose High School

Nathan Mattix, Piedmont High School

Parisa Safa, Urban School of San Francisco

Sean Morris, Albany High School

Shawn Kenner, Sharon High School

SATURDAY 8:45 AM - 10:00 AM**Papers: Computer Engineering (room: L11-L12)****Sat 8:45 AM - 10:00 AM**

- 8:45 AM Effects of a Program Integrating Course for Students of Computer Science and Engineering
Viggo Kann, KTH Royal Institute of Technology
Anna-Karin Högfeldt, KTH Royal Institute of Technology
- 9:10 AM Undergraduate Assembly Language Instruction Sweetened with the Raspberry Pi
Jalal Kawash, University of Calgary
Andrew Kuipers, University of Calgary
Leonard Manzara, University of Calgary
Robert Collier, Carleton University
- 9:35 AM Droning On: Reflections on Integrating UAV Technology into a Computer Engineering Design Laboratory
Meriel Huggard, Trinity College Dublin
Ciarán Mc Goldrick, Trinity College Dublin

Papers: Out-of-school Activities (room: L13-L14)**Sat 8:45 AM - 10:00 AM**

- 8:45 AM Meeting Graduate Employability Needs Through Open-source Collaboration with Industry
Matthew Forshaw, Newcastle University
Ellis Solaiman, Newcastle University
Oonagh McGee, Newcastle University
Hugo Firth, Newcastle University
Paul Robinson, Red Hat, Inc.
Ryan Emerson, Red Hat, Inc.
- 9:10 AM Computer History on the Move
Graham Farr, Monash University
Barbara Ainsworth, Monash University
Chris Avram, Monash University
Judy Sheard, Monash University
- 9:35 AM Agile Software Development: Study Away
Maureen Doyle, Northern Kentucky University
Candace Gibson, Northern Kentucky University
Michelle Melish, Northern Kentucky University
Rees Storm, Northern Kentucky University

Papers: Classroom Techniques (room: L5-L6)	Sat 8:45 AM - 10:00 AM
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| 8:45 AM | <p>Animated Examples as Practice Content in Java Programming Course
 <i>Roya Hosseini, University of Pittsburgh</i>
 <i>Teemu Sirkiä, Aalto University</i>
 <i>Julio Guerra, University of Pittsburgh</i>
 <i>Peter Brusilovsky, University of Pittsburgh</i>
 <i>Lauri Malmi, Aalto University</i></p> |
| 9:10 AM | <p>Improving Engagement in Introductory Courses with Homework Resubmission
 <i>Amanda Holland-Minkley, Washington & Jefferson College</i>
 <i>Thomas Lombardi, Washington & Jefferson College</i></p> |
| 9:35 AM | <p>Memory Diagrams: A Consistant Approach Across Concepts and Languages
 <i>Toby Dragon, Ithaca College</i>
 <i>Paul Dickson, Ithaca College</i></p> |

Papers: Computing in Middle School (room: L2-L3)	Sat 8:45 AM - 10:00 AM
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| 8:45 AM | <p>MyCS at 5: Assessing a Middle-years CS Curriculum
 <i>Brenda Castro, Harvey Mudd College</i>
 <i>Terrence Diaz, Harvey Mudd College</i>
 <i>Marissa Gee, Harvey Mudd College</i>
 <i>Rebekah Justice, Harvey Mudd College</i>
 <i>David Kwan, Harvey Mudd College</i>
 <i>Preethi Seshadri, Harvey Mudd College</i>
 <i>Zachary Dodds, Harvey Mudd College</i></p> |
| 9:10 AM | <p>Factors Influencing Computer Science Learning in Middle School
 <i>Shuchi Grover, Stanford University/SRI International</i>
 <i>Roy Pea, Stanford University</i>
 <i>Stephen Cooper, Stanford University</i></p> |
| 9:35 AM | <p>“What Is A Computer?” What do Secondary School Students Think?
 <i>Shuchi Grover, SRI International</i>
 <i>Daisy Rutstein, SRI International</i>
 <i>Eric Snow, SRI Interntaional</i></p> |

Papers: Games (room: Cotton Row)	Sat 8:45 AM - 10:00 AM
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| 8:45 AM | <p>A Multidisciplinary, Multifaceted Approach to Improve the Computer Science based Game Design Education: Methodology and Assessment
 <i>Chang Yun, University of Houston</i>
 <i>Hesam Panahi, University of Houston</i>
 <i>Zhigang Deng, University of Houston</i></p> |
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9:10 AM Design Insights into the Creation and Evaluation of a Computer Science Educational Game
Britton Horn, Northeastern University
Christopher Clark, Northeastern University
Oskar Strom, Northeastern University
Hilery Chao, Brown University
Amy Stahl, Northeastern University
Casper Hartevelt, Northeastern University
Gillian Smith, Northeastern University

9:35 AM Experiences from an Experiential Learning Course on Games Development
Stephan Krusche, Technische Universität München
Barbara Reichart, Technische Universität München
Paul Tolstoi, Technische Universität München
Bernd Bruegge, Technische Universität München

Student Research Competition	Thu 8:45 AM - 10:00 AM
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Undergraduate Semi-finalist Presentations (room: L8)

Graduate Semi-finalist Presentations (room: L9)

Special Session (room: Steamboat)	Sat 8:45 AM - 10:00 AM
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Nifty Assignments

Nick Parlante, Stanford University
Julie Zelenski, Stanford University
Kevin Wayne, Princeton University
John DeNero, University of California, Berkeley
Baker Franke, Code.org
Arvind Bhusnurmath, University of Pennsylvania
Karen Her, University of Pennsylvania
Kristen Gee, University of Pennsylvania
Eric Manley, Drake University
Timothy Urness, Drake University
Marvin Zhang, University of California, Berkeley

Supporter Session (room: River Bluff)	Sat 8:45 AM - 10:00 AM
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Gradescope Supporter Session - Build an Autograder in 45 Minutes

Supporter Session (room: Sultana)	Sat 8:45 AM - 10:00 AM
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GitHUB Supporter Session - Classroom for GitHub: A Tool Designed for Educators

SATURDAY 10:00 AM - 10:45 AM
Break, Exhibits & Demos

Demos (room: Exhibit Hall)

Sat 10:00 AM - 10:45 AM

Bringing Real-World Data And Visualizations Into Data Structures Courses Using BRIDGES

Kalpathi Subramanian, The University of North Carolina at Charlotte

Jamie Payton, The University of North Carolina at Charlotte

David Burlinson, The University of North Carolina at Charlotte

Mihai Mehedint, The University of North Carolina at Charlotte

ParseIT: A Tool for Teaching Parsing Techniques

Amey Karkare, IIT Kanpur

Nimisha Agarwal, IIT Kanpur

NSF Showcase (room: Exhibit Hall)

Sat 10:00 AM - 11:30 AM

Bringing a Rigorous CS Principles Course to the Largest School System in the U.S.

Dan Garcia, UC Berkeley

Brian Harvey, UC Berkeley

Tiffany Barnes, NC State

June Mark, EDC

E. Paul Goldenberg, EDC

Patternlets and TSGL: CSinParallel Tools for Visualizing Parallel Behavior

Joel C. Adams, Calvin College

Richard Brown, St. Olaf College

Elizabeth Shoop, Mcalester College

Computing in the Arts: Multidisciplinary I

Susan Reiser, UNC Asheville

Rebecca Bruce, UNC Asheville

Collaborative Project: Building Virtual Research, Interactive, Service, and Experiential Learning
Modules for Cyber Security Education

Feng Li, Purdue

SATURDAY 10:45 AM - 12:00 PM**Papers: Security (room: L11-L12)****Sat 10:45 AM - 12:00 PM**

- 10:45 AM Facilitating a Battle Between Hackers: Computer Security Outside of the Classroom
Nathan Backman, Buena Vista University
- 11:10 AM A Reflective Approach to Assessing Student Performance in Cybersecurity Exercises
Richard Weiss, The Evergreen State College
Michael Locasto, University of Calgary
Jens Mache, Lewis and Clark College
- 11:35 AM The Teaching Privacy Curriculum
Serge Egelman, International Computer Science Institute
Julia Bernd, International Computer Science Institute
Gerald Friedland, International Computer Science Institute
Daniel Garcia, University of California, Berkeley

Papers: Alternative Learning Experiences (room: L13-L14)**Sat 10:45 AM - 12:00 PM**

- 10:45 AM A Programming Contest Strategy Guide
Aaron Bloomfield, University of Virginia
Borja Sotomayor, University of Chicago
- 11:10 AM Teaching "Lawfulness" With Kodu
David Touretzky, Carnegie Mellon University
Christina Gardner-McCune, University of Florida
Ashish Aggarwal, University of Florida
- 11:35 AM Datathons: An Experience Report of Data Hackathons for Data Science Education
Craig Anslow, Middlesex University
John Brosz, University of Calgary
Frank Maurer, University of Calgary
Mike Boyes, University of Calgary

Papers: CS Ed Research 3 (room: L5-L6)**Sat 10:45 AM - 12:00 PM**

- 10:45 AM Retention of Flow: Evaluating a Computer Science Education Week Activity
Alexander Repenning, School of Education FHNW
Ashok Basawapatna, SUNY Old Westbury
Dorit Assaf, School of Education FHNW
Carmine Maiello, School of Education FHNW
Nora Escherle, School of Education FHNW

11:10 AM Students' Initial Course Motivation and Their Achievement and Retention in College CS1 Courses
Duane F. Shell, University of Nebraska-Lincoln
Leen-Kiat Soh, University of Nebraska-Lincoln
Abraham Flanigan, University of Nebraska-Lincoln
Markeya Peteranetz, University of Nebraska-Lincoln

11:35 AM Towards a Common Framework for Evaluating Computing Outreach Activities
Adrienne Decker, Rochester Institute of Technology
Monica M. McGill, Bradley University
Amber Settle, DePaul University

Papers: K-12 Teaching (room: L2-L3)	Sat 10:45 AM - 12:00 PM
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10:45 AM CS Teacher Experiences with Educational Technology, Problem-Based Learning, and a CS Principles Curriculum
George Veletsianos, Royal Roads University
Bradley Beth, The University of Texas at Austin
Calvin Lin, The University of Texas at Austin

11:10 AM Contextualized Teaching in the Lower Secondary Education * Long-term Evaluation of a CS Course from Grade 6 to 10
Arno Pasternak, TU Dortmund

11:35 AM Landscape of K-12 Computer Science Education in the U.S.: Perceptions, Access, and Barriers
Jennifer Wang, Google, Inc.
Hai Hong, Google, Inc.
Jason Ravitz, Google, Inc.
Sepehr Moghadam, Google, Inc.

Papers: Tools (room: Cotton Row)	Sat 10:45 AM - 12:00 PM
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10:45 AM Supporting Active Learning by Introducing an Interactive Teaching Tool in a Data Structures and Algorithms Course
Tommy Färnqvist, Linköping University
Fredrik Heintz, Linköping University
Patrick Lambrix, Linköping University
Linda Mannila, Åbo Akademi University
Chunyan Wang, Linköping University

11:10 AM Incorporating Analogies and Worked Out Examples as Pedagogical Strategies in a Computer Science Tutoring System
Rachel Harsley, University of Illinois at Chicago
Nick Green, University of Illinois at Chicago
Mehrdad Alizedah, University of Illinois at Chicago
Sabita Acharya, University of Illinois at Chicago
Davide Fossati, Carnegie Mellon University in Qatar
Barbara Di Eugenio, University of Illinois at Chicago
Omar AlZoubi, Carnegie Mellon University in Qatar

11:35 AM SEURAT_Edu: A Tool to Assist and Assess Student Decision-Making in Design
John Malloy, Miami University
Janet Burge, Wesleyan University

Special Session (room: Steamboat)	Sat 10:45 AM - 12:00 PM
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Advanced Placement Computer Science Principles (APCSP): A Report from Teachers
Owen Astrachan, Duke University
R. Brook Osborne, Code.org

Special Session (room: Mississippi)	Sat 10:45 AM - 12:00 PM
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Special Session: Helping Students to Develop Communication, Teamwork, and Other Process Skills with POGIL
Clifton Kussmaul, Muhlenberg College
Helen Hu, Westminster College
Tammy Pirmann, School District of Springfield Township

Supporter Session (room: River Bluff)	Sat 10:45 AM - 12:00 PM
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ZyBooks Supporter Session - Improving CS Teaching

SATURDAY 12:00 PM - 2:00 PM Luncheon - Karen Lee Ashcraft - University of Colorado Boulder

SATURDAY 3:00 PM - 6:00 PM
Workshops

Workshop #401: JavaScript Applications for CS0/CS1: Getting Hands-on with Code.org's App Lab (room: L1)

Baker Franke, Code.org

Sarah Filman, Code.org

Brook Osborne, Code.org

Workshop #402: Programming Web Services on the Cloud with Node.js (room: L2-L3)

Ariel Ortiz, Tecnologico de Monterrey, Campus Estado de Mexico

Workshop #403: Teaching Robotics Using ROS (room: L5-L6)

Nathan Sprague, James Madison University

Ralph Grove, James Madison University

Workshop #405: Advanced Placement Computer Science Principles Performance Task: Create – Applications from Ideas, Approaches to Programming Collaboratively. It's a Hackathon Workshop! (room: L9)

Lien Diaz, College Board

Richard Kick, Newbury Park High School

Andrew Kuemmel, Madison West High School

Workshop #406: Scaling up for CS10K: Teaching and Supporting New Computer Science High School Teachers (room: L10)

Tiffany Barnes, North Carolina State University

Jamie Payton, University of North Carolina at Charlotte

Daniel Garcia, University of California and Berkeley

Workshop #407: App Development for All! (room: L11-L12)

David Hayes, Lane Tech College Prep High School (Chicago Public Schools)

Dale Reed, University of Illinois at Chicago

Workshop #408: Mixing Code and 3D Printers with Madeup (room: L13-L14)

Chris Johnson, University of Wisconsin, Eau Claire

Heather Amthauer, University of Wisconsin, Eau Claire

Ryan Hardt, University of Wisconsin, Eau Claire

Peter Bui, University of Notre Dame

Workshop #409: Infusing Cooperative Learning into Early Computer Science Courses to Support Improved Engagement (room: River Bluff)

Fran Trees, Rutgers University

Jeff Gray, University of Alabama

Owen Astrachan, Duke University

Workshop #410: Solving the Cloud Computing Impasse with MBaaS (room: Sultana)

Michael Rogers, Northwest Missouri State University

Bill Siever, Western Illinois University

Workshop #411: Reviewing NSF Proposals: Learn about Effective Proposal Writing via the Review Process (room: Mississippi)

Paul Tymann, The National Science Foundation

Michael Erlinger, The National Science Foundation

Workshop #412: Transition to Java Using Alice 3 (room: Cotton Row)

Donald Slater, Alice Project, Carnegie Mellon University

Wanda Dann, Alice Project, Carnegie Mellon University