

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: Teaching Computing Foundations to Non-Majors (room: 2503A)

Catherine Bareiss, Olivet Nazarene University

Larry Vail, Olivet Nazarene University

Workshop #2: Teaching Parallel & Distributed Computing with MPI (room: 2502A)

Joel Adams, Calvin College

Richard Brown, St Olaf College

Elizabeth Shoop, Macalester College

Workshop #3: Teaching Computer Science Soft Skills (room: 2502B)

Orit Hazzan, Technion – Israel Institute of Technology

Gadi Har-Shai, Technion – Israel Institute of Technology

Workshop #4: SEED Labs: Using Hands-on Lab Exercises for Computer SEcurity EDucation (room: 2504A)

Wenliang Du, Syracuse University

Workshop #5: Teaching Introductory Computer Science For A Diverse Student Body: Girls Who Code Style (room: 2505A)

Jeff Stern, University of Michigan

Ashley Gavin, Girls Who Code

Kari Bancroft, Girls Who Code

Workshop #6: Making Music with Computers: Creative Programming in Python (room: 2503B)

Bill Manaris, College of Charleston

Andrew Brown, Griffith University

Tobias Kohn, ETH Zurich, Switzerland

Workshop #7: Intellectual Property Law Basics for Computer Science Instructors (room: 2505B)

David G. Kay, University of California, Irvine

THURSDAY 8:30 AM - 10:00 AM**Plenary Session****Jessica Hodgins****Vice President, Disney Research and Professor, Carnegie Mellon University****THURSDAY 10:00 AM - 10:45 AM****Break, Exhibits and Demos**

Demo: EarSketch: A Web-based Environment for Teaching Introductory Computer Science
Through Music Remixing

Jason Freeman, Georgia Institute of Technology

Brian Magerko, Georgia Institute of Technology

Regis Verdin, Georgia Institute of Technology

Demo: Blockly Language Creation and Applications: Visual Programming for Media Computation
and Bluetooth Robotics Control

Jake Trower, University of Alabama

Jeff Gray, University of Alabama

THURSDAY 10:45 AM - 12:00 PM

Papers: CS Education Research (room: 2502A)

Thu 10:45 AM - 12:00 PM

10:45 AM Student Response to Teaching of Memory Cues and Resumption Strategies in
Computer Science Classes

Noah John, Colorado State University

Jaime Ruiz, Colorado State University

11:10 AM Closing The Cyberlearning Loop: Enabling Teachers To Formatively Assess
Student Programming Projects

Ashok Basawapatna, AgentSheets Inc.

Alexander Repenning, AgentSheets Inc.

Kyu Han Koh, University of Colorado Boulder

11:35 AM Analyzing Student Work Patterns Using Programming Exercise Data

Jaime Spacco, Knox College

Paul Denny, University of Auckland

Brad Richards, University of Puget Sound

David Babcock, York College

David Hovemeyer, York College

James Moscola, York College

Robert Duvall, Duke University

Papers: Curriculum (room: 2503A)	Thu 10:45 AM - 12:00 PM
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| 10:45 AM | <p>Teaching Computing as Science in a Research Experience
 <i>Jerod Weinman, Grinnell College</i>
 <i>David Jensen, University of Massachusetts Amherst</i>
 <i>David Lopatto, Grinnell College</i></p> |
| 11:10 AM | <p>Backward Design: An Integrated Approach to a Systems Curriculum
 <i>Michael Kirkpatrick, James Madison University</i>
 <i>Mohamed Aboutabl, James Madison University</i>
 <i>David Bernstein, James Madison University</i>
 <i>Sharon Simmons, James Madison University</i></p> |
| 11:35 AM | <p>A Module-based Approach to Adopting the 2013 ACM Curricular Recommendations on Parallel Computing
 <i>Martin Burtscher, Texas State University</i>
 <i>Wuxu Peng, Texas State University</i>
 <i>Apan Qasem, Texas State University</i>
 <i>Hongchi Shi, Texas State University</i>
 <i>Dan Tamir, Texas State University</i>
 <i>Heather Thiry, University of Colorado at Boulder</i></p> |

Papers: CS1/CS2: Focus on CS1 (room: 3501C)	Thu 10:45 AM - 12:00 PM
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| 10:45 AM | <p>Creating a Computer Simulator as a CS1 Student Project
 <i>Kian Pokorny, McKendree University</i></p> |
| 11:10 AM | <p>Program Decomposition and Complexity in CS1
 <i>Aaron Keen, California Polytechnic State University</i>
 <i>Kurt Mammen, California Polytechnic State University</i></p> |
| 11:35 AM | <p>Supporting Creativity and User Interaction in CS 1 Homework Assignments
 <i>Tammy VanDeGrift, University of Portland</i></p> |

Papers: Beyond CS2: Miscellaneous Topics (room: 3501D)	Thu 10:45 AM - 12:00 PM
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| 10:45 AM | <p>Embedding Secure Coding Instruction into the IDE: A Field Study in an Advanced CS Course
 <i>Michael Whitney, UNC Charlotte</i>
 <i>Heather Lipford-Richter, UNC Charlotte</i>
 <i>Bill Chu, UNC Charlotte</i>
 <i>Jun Zhu, UNC Charlotte</i></p> |
| 11:10 AM | <p>Augmenting Undergraduate Computer Science Education with Programmable Smartwatches
 <i>Andrey Esakia, Virginia Tech</i>
 <i>Shuo Niu, Virginia Tech</i>
 <i>Scott McCrickard, Virginia Tech</i></p> |

11:35 AM Simulating IBM Watson in the Classroom
Wlodek Zadrozny, UNC Charlotte
Sean Gallagher, UNC Charlotte
Walid Shalaby, UNC Charlotte
Adarsh Manjunath, UNC Charlotte

Special Session (room: 3501H)**Thu 10:45 AM - 12:00 PM****Tutorial: Concurrency with Alice 3 and Java**

Wanda Dann, Carnegie Mellon University
Dennis Cosgrove, Carnegie Mellon University
Donald Slater, Carnegie Mellon University

Panel (room: 3501G)**Thu 10:45 AM - 12:00 PM****Booming Enrollments – Good Times?**

Tracy Camp, Colorado School of Mines
Stu Zweben, The Ohio State University
Ellen Walker, Hiram College
Lecia Barker, University of Texas at Austin

Special Session (room: 2505A)**Thu 10:45 AM - 12:00 PM****Integrating Live Projects Into Computing Curriculum**

Joseph Chase, Radford University
Prem Uppuluri, Radford University
Tracy Lewis, Radford University
Ian Barland, Radford University
Jeff Pittges, Radford University

Supporter Session (room: TBA)**Thu 10:45 AM - 12:00 PM**

TBA

Supporter Session (room: TBA)**Thu 10:45 AM - 12:00 PM**

TBA

THURSDAY 12:00 PM - 1:45 PM

**LUNCH: FirstTimers' Lunch (SIGCSE Award for Lifetime Service to the
Computer Science Education Community - Frank Young - Emeritus Professor,
Rose-Hulman Institute of Technology) or on your own**

THURSDAY 1:45 PM - 3:00 PM**Papers: Automated Assessment (room: 2503A)****Thu 1:45 PM - 3:00 PM**

- 1:45 PM WebWolf: Towards a Simple Framework for Automated Assessment of Webpage Assignments in an Introductory Web Programming Class
Antonio Siochi, Christopher Newport University
William Hardy, Christopher Newport University
- 2:10 PM The Role of Automation in Undergraduate Computer Science Education
Chris Wilcox, Colorado State University
- 2:35 PM Mechanical TA: Partially Automated High-Stakes Peer Grading
James Wright, University of British Columbia
Chris Thornton, University of British Columbia
Kevin Leyton-Brown, University of British Columbia

Papers: Gender & Diversity (room: 2502A)**Thu 1:45 PM - 3:00 PM**

- 1:45 PM Are Females Disinclined to Tinker in Computer Science?
Samantha Krieger, Department of Computer Science, University of British Columbia
Meghan Allen, Department of Computer Science, University of British Columbia
Catherine Rawn, Department of Psychology, University of British Columbia
- 2:10 PM The Emerging Role of Self-Perception in Student Intentions
Jennifer Dempsey, Dept. of Computer Science, University of Arizona
Richard T. Snodgrass, Dept. of Computer Science, University of Arizona
Isabel Kishi, Dept. of Computer Science, University of Arizona
Allison Titcomb, Biosphere II, University of Arizona
- 2:35 PM StitchFest: Diversifying Perceptions, Participation, and Projects in a College Hackathon to Increase Female Participation in Computing
Gabriela Richard, University of Pennsylvania
Yasmin Kafai, University of Pennsylvania
Barrie Adleberg, University of Pennsylvania
Orkan Telhan, University of Pennsylvania

Papers: Non-majors/Interdisciplinary (room: 3501E)		Thu 1:45 PM - 3:00 PM
1:45 PM	Computer Scientists at the Biology Lab Bench <i>Andrea Tartaro, Furman University</i> <i>Renee J. Chosed, Furman University</i>	
2:10 PM	Data Journalism: Lessons Learned While Designing an Interdisciplinary Service Course <i>Christopher Plaue, University of Georgia</i> <i>Lindsey Cook, U.S. News & World Report</i>	
2:35 PM	Introducing Computing Concepts to Non-Majors: A Case Study in Gothic Novels <i>Heather Bort, Marquette University</i> <i>Mimi Czarnik, Alverno College</i> <i>Dennis Brylow, Marquette University</i>	
Papers: CS1/CS2: Themed Approaches (room: 3501C)		Thu 1:45 PM - 3:00 PM
1:45 PM	Statistics-infused Introduction to Computer Science <i>Olaf Hall-Holt, St. Olaf College</i> <i>Kevin Sanft, St. Olaf College</i>	
2:10 PM	Building Worlds: Bridging Imperative-First and Object-Oriented Programming in CS1-CS2 <i>Zoë Wood, California Polytechnic State University</i> <i>Aaron Keen, California Polytechnic State University</i>	
2:35 PM	A Data Programming CS1 Course <i>Ruth Anderson, University of Washington</i> <i>Michael Ernst, University of Washington</i> <i>Robert Ordonez, Southern Adventist University</i> <i>Paul Pham, The Evergreen State College</i> <i>Ben Tribelhorn, Seattle University</i>	
Papers: Beyond CS: Programming Languages/Compilers (room: 3501D)		Thu 1:45 PM - 3:00 PM
1:45 PM	A Descent into the Maelstrom: Teaching Legacy Programming and Re-engineering <i>Michael Wirth, School of Computer Science, University of Guelph</i>	
2:10 PM	A Framework for Teaching Programming Languages <i>Kent Lee, Luther College</i>	
2:35 PM	The Interpreter In An Undergraduate Compilers Course <i>John Lasseter, Hobart & William Smith Colleges</i>	

Panel (room: 3501G)**Thu 1:45 PM - 3:00 PM****Panel on Flipped Classrooms***Jesse Heines, University of Massachusetts Lowell**Jeffrey Popyack, Drexel University**Briana Morrison, Southern Polytechnic State University**Kate Lockwood, University of St. Thomas**Doug Baldwin, SUNY Geneseo***Special Session (room: 3501H)****Thu 1:45 PM - 3:00 PM****Computer Science Principles Curricula: On-the-ground, adoptable, adaptable, approaches to teaching***Owen Astrachan, Duke University**Daniel Garcia, University of California Berkeley**Bennett Brown, Project Lead The Way**Jeff Gray, University of Alabama**Ralph Morelli, Trinity College**Marie desJardins, University of Maryland, Baltimore County**Calvin Lin, University of Texas at Austin**Nigamanth Sridhar, Cleveland State University**Bradley Beth, University of Texas at Austin***Supporter Session (room: TBA)****Thu 1:45 PM - 3:00 PM**

Google

Supporter Session (room: TBA)**Thu 1:45 PM - 3:00 PM**

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THURSDAY 3:00 PM - 3:45 PM**Break, Exhibits & Demos****Demo: A Classroom Tested Accessible Multimedia Resource for Engaging Underrepresented Students in Computing: The University of Maryland Curriculum In A Box***Elissa Redmiles, University of Maryland/IBM, Inc.**Mary Abad, University of Maryland**Isabella Coronado, University of Maryland**Sean Kross, University of Maryland**Amelia Malone, University of Maryland***Demo: Using BlueJ to code Java on the Raspberry Pi***Amjad Altadmri, University of Kent**Neil Brown, University of Kent**Michael Kölling, University of Kent*

THURSDAY 3:45 PM - 5:00 PM**Papers: Block Languages (room: 3501E)****Thu 3:45 PM - 5:00 PM**

- 3:45 PM DBSnap: Learning Database Queries by Snapping Blocks
Yasin Silva, Arizona State University
Jaime Chon, Arizona State University
- 4:10 PM Language Migration in non-CS Introductory Programming through Mutual Language Translation Environment
Yoshiaki Matsuzawa, Shizuoka University
Takashi Ohata, Shizuoka University
Manabu Sugiura, Keio University
Sanshiro Sakai, Shizuoka University
- 4:35 PM Scratch: A Way to Logo and Python
Mark Dorling, Computing at School, BCS Chartered Institute for IT
David White, Computing at School, BCS Chartered Institute for IT

Papers: Gender & Diversity (room: 2502A)**Thu 3:45 PM - 5:00 PM**

- 3:45 PM The Grace Hopper Regional Consortium
Gloria Townsend, DePauw University
Kay Sloan, Rockman et al
- 4:10 PM Improving Undergraduate Student Performance in Computer Science at Historically Black Colleges and Universities (HBCUs) through Industry Partnerships
A. Nicki Washington, Howard University
Legand Burge, Howard University
Marlon Mejias, Howard University
Ketly Jean-Pierre, Howard University
Qi'Anne Knox, Howard University
- 4:35 PM A Comparative Study of the Acceptability of Signs for the Brazilian Sign Language Created in Person and Remotely
Francisco Oliveira, State University of Ceará
Neiva Cardins, State University of Ceará
Adriano Freitas, Federal Institute of Ceará
Anibal Oliveira, State University of Ceará

Papers: Student Engagement: Flipped Classroom (room: 3501C)	Thu 3:45 PM - 5:00 PM
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3:45 PM	Beyond the Flipped Classroom: Learning by Doing Through Challenges and Hack-a-thons
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Michael Skirpan, University of Colorado - Boulder

Tom Yeh, University of Colorado - Boulder

4:10 PM	Flipped Classroom Strategies for CS Education
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Mary Lou Maher, UNC Charlotte

Heather Lipford, UNC Charlotte

Celine Latulipe, UNC Charlotte

Audrey Rorrer, UNC Charlotte

4:35 PM	The Effectiveness of Video Quizzes in a Flipped Class
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Lisa Lacher, University of Houston - Clear Lake

Mark Lewis, Trinity University

Papers: CS1/CS2: Persistence and Attitudes (room: 3501D)	Thu 3:45 PM - 5:00 PM
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3:45 PM	Reconsidering the Impact of CS1 on Novice Attitudes
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Amber Settle, DePaul University

John Lalor, DePaul University

Theresa Steinbach, DePaul University

4:10 PM	Drop, Fail, Pass, Continue: Persistence in CS1 and Beyond in Traditional and Inverted Delivery
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Diane Horton, University of Toronto

Michelle Craig, University of Toronto

4:35 PM	Towards Incremental Separation of Surmountable and Insurmountable Programming Difficulties
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Jason Carter, Cisco System Inc

Prasun Dewan, The University of North Carolina at Chapel Hill

Mauro Pichiliani, Insti tuto Tecnológico de Aeronáutica

Papers: Beyond CS2: Algorithms (room: 2503A)	Thu 3:45 PM - 5:00 PM
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3:45 PM	Illustrating the Interaction of Algorithms and Data Structures Using the Matching Problem
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Joan M. Lucas, The College at Brockport, State Univ. of New York

4:10 PM	Fibonacci in The Curriculum: Not Just a Bad Recurrence
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Saad Mneimneh, Hunter College CUNY

4:35 PM	Randomized Reduction
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Brian Dean, Clemson University

Raghuveer Mohan, Clemson University

Chad Waters, Clemson University

Special Session (room: 3501G)**Thu 3:45 PM - 5:00 PM****Curricular Assessment: Tips and Techniques***Henry Walker, Grinnell College**Sue Fitzgerald, Metropolitan State University, MN**John Dooley, Knox College***Panel (room: 3501H)****Thu 3:45 PM - 5:00 PM****Best Practices for IRB Approval: Four Perspectives***Michael Kirkpatrick, James Madison University**Janice Cuny, National Science Foundation**Mark Guzdial, Georgia Institute of Technology**Amanda Holland-Minkley, Washington & Jefferson College**Cliff Shaffer, Virginia Polytechnic Institute and State University***Panel (room: 2505A)****Thu 3:45 PM - 5:00 PM****Supporting the Computer Science Learning Process***Amy Briggs, Middlebury College**David Bau, Google**Caroline Meeks, Prospect Hill Academy**Pat Yongpradit, Code.org***Supporter Session (room: TBA)****Thu 3:45 PM - 5:00 PM**

ABET

BOFS - Flock #1 (room: TBA in Marriott Hotel)**Thu 5:30 PM - 6:20 PM****Universal Access to Computing Education***Richard Ladner, University of Washington**Brianna Blaser, University of Washington**Daniela Marghitu, Auburn University***Mapping Alice Curriculum to Standards***Donald Slater, Carnegie Mellon University**Wanda Dann, Carnegie Mellon University**Stephen Cooper, Stanford University***Brainstorming How to Use Lego Mindstorms EV3 in the Classroom***Greg Kawell, Samford University***What Math is the Right Math for Computing?***Doug Baldwin, SUNY Geneseo**John Dougherty, Haverford College*

K12 CS Teaching Methods Courses

*Shuchi Grover, SRI International**R. Benjamin Shapiro, Tufts University**Brian Dorn, University of Nebraska, Omaha*

Process Oriented Guided Inquiry Learning in Computer Science

*Clifton Kussmaul, Muhlenberg College**Helen Hu, Westminster College**Chris Mayfield, James Madison University*

A Town Meeting: SIGCSE Committee on Expanding the Women-in-Computing Community

Gloria Townsend, DePauw University

Resources and strategies for flipped classrooms

*Edward Gehringer, North Carolina State University**Mark Hall, University of Wisconsin - Colleges*

The Great Objective-C Swift Migration of 2015

*Michael Rogers, Northwest Missouri State University**Bill Siever, Western Illinois University*

Teaching Track Faculty in CS

*Mark Sherriff, University Virginia**Dan Garcia, University of California, Berkeley*

Juggling the Jigsaw: Enabling CS1 Growing Enrollment and Diversity at Undergraduate Institutions

*Farzana Rahman, James Madison University**Dee Weikle, Eastern Mennonite University*

Interactive Ebooks and Course Materials -- A BOF for Authors and Instructors

*Cay Horstmann, San Jose State University**Smita Bakshi, Zyante Inc.**Amruth Kumar, Ramapo College of New Jersey**Frank Vahid, University of California Riverside*

Updating the ACM/IEEE 2008 Curriculum in Information Technology

*Mihaela Sabin, University of New Hampshire**Svetlana Peltsverger, Southern Polytechnic State University**Cara Tang, Portland Community College*

Teaching Algebra and Computing through Bootstrap and Program by Design

*Emmanuel Schanzer, Harvard Graduate School of Education**Kathi Fisler, WPI*

Teaching Security using Hands-On Exercises in 2015

Richard Weiss, The Evergreen State College

Michael Locasto, The University of Calgary

Jens Mache, Lewis & Clark College

Elizabeth Hawthorne, Union County College

Justin Cappos, New York University

Blair Taylor, Towson University

Ambereen Siraj, Tennessee Tech University

Creating Learning Assessment Tools for Cybersecurity Education

Geoffrey Herman, University of Illinois at Urbana-Champaign

Ronald Dodge, United States Military Academy

Automatically generated feedback for CS student work: best practices

Bruce Char, Drexel University

Jeremy Johnson, Drexel University

Jeffrey Popyack, Drexel University

William Mongan, Drexel University

Handling Very Large Lecture Courses: Keeping the Wheels on the Bus

Josh Hug, UC Berkeley

Computer Science Principles: Expanding the Community

Owen Astrachan, Duke University

Lien Diaz, College Board

Amy Briggs, Middlebury College

Fran Trees, Rutgers University

Richard Kick, Newbury Park High School

BOFS - Flock #2 (room: TBA in Marriott Hotel)	Thu 6:30 PM - 7:20 PM
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Proposed ABET Computer Science Program Criteria and the CS2013 Curriculum

Michael Oudshoorn, Wentworth Institute of Technology

Stan Thomas, Wake Forest University

Barbara Boucher Owens, Southwestern University

Deborah Trytten, University of Oklahoma

Mary Jane Willshire-Fairley, Capella University

AP CS A – Sharing teaching strategies and curricular ideas

Paul Tymann, Rochester Institute of Technology

Lester Wainright, Charlottesville High School

Sandy Czajka, Riverside Brookfield High School

Perspectives on How Computer Science Curricula 2013 Influences Two-Year College Programs

Cindy Tucker, Bluegrass Community and Technical College

Cara Tang, Portland Community College

Elizabeth Hawthorne, Union County College

New Concepts in Database System Education – Experiences and Ideas

Carsten Kleiner, University of Applied Sciences&Arts Hannover

Addressing Professional Development Needs for K-12 CS – Working with Your Local CSTA Chapter

David Reed, Creighton University

Frances P. Trees, Rutgers University

Study Abroad Experiences in Computer Science

Michael Goldweber, Xavier University

Sharing Best Practices for Alumni Engagement

Meghan Allen, Department of Computer Science, University of British Columbia

Ben Coleman, Department of Mathematics and Computer Science, Moravian College

Diane Horton, Department of Computer Science, University of Toronto

Lynn Lambert, Physics, Computer Science and Engineering Department,

Christopher Newport University

Michele Ng, Department of Computer Science, University of British Columbia

Assessments for Computational Thinking in K-12

Shuchi Grover, SRI International

Eric Snow, SRI International

Marie Bienkowski, SRI International

Student Contributions to Humanitarian Free and Open Source Software (HFOSS)

Lori Postner, Nassau Community College
Stoney Jackson, Western New England University
Ben Coleman, Moravian College
Suzanne Mello-Stark, University of Rhode Island
Samuel Rebelsky, Grinnell College

Partnering to Promote State-by-State Computing Education Reform

W. Richards Adrion, University of Massachusetts Amherst
Mark Guzdial, Georgia Institute of Technology
Barbara Ericson, Georgia Institute of Technology

Open Educational Resources: What Next?

Lillian (Boots) Cassel, Villanova University
Cynthia Lee, Stanford University
Cliff Shaffer, Virginia Tech
Darina Dicheva, Winston-Salem State University
David Hovemeyer, York College of Pennsylvania

Computer Science: Small Department Initiative

Catherine Bareiss, Olivet Nazarene University

Empirical Research in CS Education

Mark Sherriff, University Virginia
Sarah Heckman, North Carolina State University

CS 4 Everyone: Diversifying the K-12 Pipeline for CS at College and High School Level

Farzana Rahman, James Madison University
Jennifer Stevens, Virginia Advanced Study Strategies (VASS)
Sharon Simmons, James Madison University

Preparing Undergraduates to Make the Most of Attending CS Conferences

Janet Davis, Grinnell College
Christine Alvarado, University of California, San Diego
Miranda Parker, Georgia Tech
Jennelle Nystrom, Yahoo!

Can Programming Boot Camp Help Under-represented College Students Succeed in Computing Degrees?

Kristine Nagel, Georgia Gwinnett College
Sonal Dekhane, Georgia Gwinnett College
Nannette Napier, Georgia Gwinnett College

SIGCSE Reads: Time for Book Discussion

Rebecca Bates, Minnesota State University, Mankato

Judy Goldsmith, University of Kentucky

Valerie Summet, Emory University

Working with Undergraduate Teaching Assistants: Best practices and lessons learned

Colleen Lewis, Harvey Mudd College

Chris Gregg, Tufts University

Blended CS Courses using Massive, Open, Online Courses (and other online resources)

Douglas Fisher, Vanderbilt University

THURSDAY 7:30 PM - 8:30 PM

Reception (room: TBA in Marriott Hotel)

FRIDAY 8:30 AM - 10:00 AM

Plenary Session - SIGCSE Award for Outstanding Contribution to Computer Science Education - Mark Allen Weiss - Professor, Florida International University

FRIDAY 10:00 AM - 10:45 AM**Break, Exhibits, Demos & Posters**

Demo: Looking Glass

Caitlin Kelleher, Washington University in St. Louis

Demo: CS1 and CS2 Materials for Engaging and Retaining Undergraduate CS Students

Alvaro Monge, California State University Long Beach

Beth Quinn, NCWIT

Cameron Fadjo, Google

Poster: Factors Affecting High School Student Engagement in Introductory Computer Science Classes

Sarah Wille, Outlier Research & Evaluation / CEMSE / University of Chicago

Dae Kim, Outlier Research & Evaluation / CEMSE / University of Chicago

Poster: Exploring Computer Science Course and Math Achievement

Daniel Lewis, Santa Clara University

Lisa Kohne, SmartStart Evaluation & Research

Timothy Mechlinski, SmartStart Evaluation & Research

Mariana Schmalstig, SmartStart Evaluation & Research

Poster: Just Enough Programming for Eight-years Olds

Gavin Kearns, Paul Elementary School

Karen H Jin, Department of Computer Science, University of New Hampshire

Poster: Moving Ahead with Undergraduate Computational Science Programs

Lori Carter, Point Loma Nazarene University

Tim Little, Point Loma Nazarene University

Claire Mathews, Point Loma Nazarene University

Poster: Computing in the Classroom: A Workshop for Teachers to Infuse Computational Thinking into K-12 Classrooms

Yeşem Kurt-Peker, Columbus State University

Lydia Ray, Columbus State University

Rania Hodhod, Columbus State University

Shamim Khan, Columbus State University

Poster: Using POGIL Activities to Teach CS Principles to Diverse Students

Helen Hu, Westminster College

Poster: A Case Study on Adding Computer Science as a Math Graduation Elective: A Report from the Alabama CS/Mathematics Crosswalk Committee

Jeff Gray, University of Alabama

Mary Boehm, A+ College Ready

Carol Crawford, A+ College Ready

Jeff Baker, Huntsville High School

Carol Yarbrough, Alabama School of Fine Arts

Jill Westerlund, Hoover High School

Gina McCarley, Lawrence County High School

Kitty Morgan, A+ College Ready

Kelley Rouse, Montgomery County Schools

Poster: Creating New Languages in Blockly: Two Case Studies in Media Computation and Robotics

Jake Trower, University of Alabama

Jeff Gray, University of Alabama

Poster: Automating Software Engineering Best Practices Using an Open Source Continuous Integration Framework

Sarah Heckman, NC State University

Jason King, NC State University

Michael Winters, NC State University

Poster: A Bottom-Up Approach to Teaching Server-Side Web Development Skills

Ariel Ortiz, Tecnologico de Monterrey, Campus Estado de Mexico

Poster: Teaching Text-based Programming in a Blocks-based World

David Weintrop, Northwestern University

Uri Wilensky, Northwestern University

Jennifer Roscoe, Lane Tech College Prep

Daniel Law, Lane Tech College Prep

Poster: Summer Programming Boot Camp: A Strategy for Retaining Women in IT

Sonal Dekhane, Georgia Gwinnett College

Kristine Nagel, Georgia Gwinnett College

Nannette Napier, Georgia Gwinnett College

Poster: Predicting Student Performance using Commit Logs and Source Code Analysis

Chris Mulligan, Columbia University

Ruchir Khaitan, Columbia University

Samir Mathrani, Columbia University

Jae Woo Lee, Columbia University

Julia Hirschberg, Columbia University

Poster: Evaluating Scratch programs to assess computational thinking in a science lesson

Jennifer Albert, North Carolina State University

Barry Peddycord III, North Carolina State University

Tiffany Barnes, North Carolina State University

Poster: Integrating Cutting Edge Devices to Increase Student Retention in Programming

Evelyn Brannock, Georgia Gwinnett College

Robert Lutz, Georgia Gwinnett College

Mai Yin Tsoi, Georgia Gwinnett College

Poster: E-Assess: A Web-based tool for Coordinating and Managing Program Assessment

Jean H. French, Coastal Carolina University

D. Brian Larkins, Coastal Carolina University

Poster: CS2013 Assessment Exam

E Kent Palmer, MacMurray College

Terry Linkletter, Central Washington University

Paulette Alexander, University of North Alabama

Kewal Dhariwal, Institute for Certification of Computing Professionals

Indira R. Guzman, Trident University International

James McGuffee, Northern Kentucky University

Patricia L. Roden, University of North Alabama

Poster: Case studies of use: Creating counselor champions for change in K12 computing education

Sarah Hug, ATLAS Institute, University of Colorado

Jane Krauss, National Center for Women & Information Technology

Poster: A Qualitative Analysis of Students' Difficulties with the Quicksort Algorithm Using Arrays

Amit Maor, Claremont McKenna College/Harvey Mudd College

Poster: STEM Careers Infographic Project (SCIP): Teaching Media-Based Computational Thinking Practices

Brittany Ann Kos, University of Colorado Boulder

Poster: Algorithmic Thinking: Programs that Solve Well-defined Visual Problems

Elodie Fourquet, Colgate University

Poster: Culturally Responsive Computing: An in-depth examination of practices and outcomes in COMPUGIRLS

Catherine Ashcraft, National Center for Women & IT

Poster: Students' (Mis)Understanding of Dictionaries

Emily Stansbury, Harvey Mudd College

Poster: It's Not Just About Functionality Anymore: Expanding Student Projects with Web Ecosystems
Samuel Rebelsky, Grinnell College

Poster: "Maker Innovators": A Curriculum for Youth-created Wearable Game Design and Physical Computing through Electronic Textiles, Tangible Toolkits and Scratch
Gabriela Richard, University of Pennsylvania
Yasmin Kafai, University of Pennsylvania

Poster: Using Big Data and BKT to Evaluate Course Resources
Zachary MacHardy, UC Berkeley
Dan Garcia, UC Berkeley

FRIDAY 10:45 AM - 12:00 PM

Papers: Student Engagement: Self Explanation (room: 2502A) Fri 10:45 AM - 12:00 PM

- 10:45 AM Expressions of Abstraction: Self-Explanation in Code Production
Leigh Ann DeLyser, CSNYC
- 11:10 AM Generating Practice Questions as a Preparation Strategy for Introductory Programming Exams
Paul Denny, The University of Auckland
- 11:35 AM Benefits of Self-explanation in Introductory Programming
Arto Vihavainen, University of Helsinki
Craig S. Miller, DePaul University
Amber Settle, DePaul University

Papers: Focus on K-12: Professional Development (room: 3501C) Fri 10:45 AM - 12:00 PM

- 10:45 AM Growing a K-12 Community of Practice
Susan H. Rodger, Duke University
Stephen Cooper, Stanford University
Wanda Dann, Carnegie Mellon University
Madeleine Schep, Columbia College
RoxAnn Stalvey, College of Charleston
- 11:10 AM Computing on the Silicon Prairie: The State of CS in Nebraska Public Schools
Brian Dorn, University of Nebraska at Omaha
Derek Babb, Omaha North High School
Dawn Nizzi, Westside High School Career Center
Cory Epler, Nebraska Department of Education

- 11:35 AM Supporting CS10K: A New Computer Science Methods Course for Mathematics Education Students
Robin Flatland, Siena College Computer Science
Darren Lim, Siena College Computer Science
James Matthews, Siena College Computer Science
Scott Vandenberg, Siena College Computer Science

Papers: Soft Skills: Teamwork & Communication (room: 2503A)

Fri 10:45 AM - 12:00 PM

- 10:45 AM Using a Message Board as a Teaching Tool in an Introductory Cyber-Security Course
Christopher Brown, United States Naval Academy
Zachary Dannelly, United States Naval Academy
Raymond Greenlaw, United States Naval Academy
Andrew Phillips, United States Naval Academy
Sarah Standard, AVIAN LLC

- 11:10 AM Further Evaluations of Industry-Inspired Pair Programming Communication Guidelines with Undergraduate Students
Mark Zarb, Robert Gordon University
Janet Hughes, University of Dundee
John Richards, IBM T.J. Watson Research Center

- 11:35 AM Supporting Programming Assignments with Activity Streams: An Empirical Study
Christopher Hundhausen, Washington State University
Adam Carter, Was
Olusola Adesope, Wa

Papers: Beyond CS2: Cloud Computing (room: 3501D)

Fri 10:45 AM - 12:00 PM

- 10:45 AM Hands-On Network Programming Projects in the Cloud
Weiyang Zhu, Metropolitan State University of Denver

- 11:10 AM Teaching Cybersecurity Analysis Skills in the Cloud
Richard Weiss, The Evergreen State College
Stefan Boesen, Dartmouth College
James Sullivan, University of Calgary
Michael Locasto, University of Calgary
Jens Mache, Lewis & Clark College
Erik Nilsen, Lewis & Clark College

- 11:35 AM A Cloud Computing Course: From Systems To Services
M. Suhail Rehman, Carnegie Mellon University
Jason Boles, Carnegie Mellon University in Qatar
Mohammad Hammoud, Carnegie Mellon University in Qatar
Majd F. Sakr, Carnegie Mellon University

Special Session (room: 3501H)**Fri 10:45 AM - 12:00 PM****Budget Beowulfs: A Showcase of Inexpensive Clusters for Teaching PDC***Joel Adams, Calvin College**Suzanne Matthews, U.S. Military Academy**Charles Peck, Earlham College**Elizabeth Shoop, Macalester College**David Toth, Centre College***Panel (room: 3501G)****Fri 10:45 AM - 12:00 PM****Using App Inventor in Introductory CS Courses***Meimei Gao, Mercer County Community College**Julie Johnson, Vanderbilt University**Dale Reed, University of Illinois at Chicago**Cate Sheller, Kirkwood Community College**Franklyn Turbak, Wellesley College***Panel (room: 2505A)****Fri 10:45 AM - 12:00 PM****Research, Resources and Communities: Informal Ed as a Partner in Computer Science Education***Cameron L. Fadjo, Google, Inc.**Betsy DiSalvo, Georgia Institute of Technology**Irene Lee, Santa Fe Institute**Karen Peterson, National Girls Collaborative Project***Supporter Session (room: TBA)****Fri 10:45 AM - 12:00 PM**

Oracle

Supporter Session (room: TBA)**Fri 10:45 AM - 12:00 PM**

Teradata

FRIDAY 12:00 PM - 1:45 PM**LUNCH: on your own**

FRIDAY 1:45 PM - 3:00 PM**Papers: CS Education Research (room: 2502A)****Fri 1:45 PM - 3:00 PM**

- 1:45 PM Recursion vs. Iteration: An Empirical Study of Comprehension Revisited
Renee McCauley, College of Charleston
Brian Hanks, BFH Educational Consulting
Sue Fitzgerald, Metropolitan State University
Laurie Murphy, Pacific Lutheran University
- 2:10 PM Tracking Student Learning from Class to Exam using Isomorphic Questions
Daniel Zingaro, University of Toronto Mississauga
Leo Porter, University of California, San Diego
- 2:35 PM The Effectiveness of Visualization for Learning Expression Evaluation
Amruth Kumar, Ramapo College of New Jersey

Papers: Focus on K-12: Professional Development (room: 3501C)**Fri 1:45 PM - 3:00 PM**

- 1:45 PM Analyzing Year One of a CS Principles PD Project
Ralph Morelli, Trinity College
Chinma Uche, Connecticut Chapter, Computer Science Teachers Association
Pauline Lake, Trinity College
Lawrence Baldwin, Baldwin Research Consultancy
- 2:10 PM Field Experiences in Teaching Computer Science: Course Organization and Reflections
Lori Pollock, University of Delaware
Chrystalla Mouza, University of Delaware
James Atlas, University of Delaware
Terry Harvey, University of Delaware
- 2:35 PM A Mid-Project Report on a Statewide Professional Development Model for CS Principles
Jeff Gray, University of Alabama
Kathy Haynie, Haynie Research and Evaluation
Sheryl Packman, Gator Analytics
Mary Boehm, A+ College Ready
Carol Crawford, A+ College Ready
Deepa Muralidhar, Atlanta Girls School

Papers: Student Engagement: Active Learning (room: 3501D)

Fri 1:45 PM - 3:00 PM

- 1:45 PM Integrating Role-Playing Games into Computer Science Courses as a Pedagogical Tool
David Toth, Centre College
Mary Kayler, University of Mary Washington
- 2:10 PM Structuring Flipped Classes with Lightweight Teams and Gamification
Celine Latulipe, University of North Carolina at Charlotte
Bruce Long, University of North Carolina at Charlotte
Carlos Seminario, University of North Carolina at Charlotte
- 2:35 PM Blending Problem- and Project-Based Learning in Internet of Things Education: Case Greenhouse Maintenance
Hanna Mäenpää, University of Helsinki
Sasu Tarkoma, University of Helsinki
Samu Varjonen, University of Helsinki
Arto Vihavainen, University of Helsinki

Papers: Testing: Improving Quality of Student Testing (room: 2503A) Fri 1:45 PM - 3:00 PM

- 1:45 PM Can the Security Mindset Make Students Better Testers?
Sara Hooshangi, The George Washington University
Richard Weiss, The Evergreen State College
Justin Cappos, NYU
- 2:10 PM An Empirical Study of Iterative Improvement in Programming Assignments
Raymond Pettit, Abilene Christian University
John Homer, Abilene Christian University
Susan Mengel, Texas Tech University
Roger Gee, Abilene Christian University
Adam Starbuck, Abilene Christian University
- 2:35 PM Reconsidering Automated Feedback: A Test-Driven Approach
Kevin Buffardi, California State University, Chico
Stephen H. Edwards, Virginia Tech

Papers: Beyond CS2: OS/Virtualization (room: 3501E)**Fri 1:45 PM - 3:00 PM**

- 1:45 PM MC-Live: A Portable Computing Environment for Computer Science Students
Lee Wittenberg, Maryville College
- 2:10 PM Teaching Virtualization by Building a Hypervisor
Abhinand Palicherla, Tintri, Inc.
Tao Zhang, Stony Brook University
Donald Porter, Stony Brook University
- 2:35 PM MiniOS: an instructional platform for teaching operating systems projects
Rafael Roman Otero, University of Northern British Columbia
Alex Aravind, University of Northern British Columbia

Special Session (room: 3501G)**Fri 1:45 PM - 3:00 PM**

- Achieving a shared goal with AP Computer Science A and AP Computer Science Principles
Lien Diaz, College Board
Paul Tymann, Rochester Institute of Technology
Fran Trees, Rutgers University
Lester Wainwright, Charlottesville High School
Sandy Czajka, Riverside Brookfield High School
Richard Kick, Newbury Park High School
Andrew Kuemmel, Madison West High School

Special Session (room: 3501H)**Fri 1:45 PM - 3:00 PM**

- Towards Grand Challenges in Computing Education Across Disciplines: Setting an Agenda for Research and Pedagogy
Lecia Barker, University of Texas at Austin
Stephen Cooper, Stanford University
Andrew McGettrick, University of Strathclyde
Jason Thatcher, Clemson University
Heikki Topi, Bentley University

Supporter Session (room: TBA)**Fri 1:45 PM - 3:00 PM**

Google

Supporter Session (room: TBA)**Fri 1:45 PM - 3:00 PM**

TBA

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

Demo: Exploring computer science topics with programmable smartwatches

Shuo Niu, Virginia Tech

Andrey Esakia, Virginia Tech

Scott McCrickard, Virginia Tech

Demo: ENGAGE: A Game-based Learning Environment for Middle School Computational Thinking

Kristy Boyer, North Carolina State University

Philip Buffum, North Carolina State University

Poster: Student Board-Writing to Integrate Communication Skills and Content to Enhance Student Learning

Mark Hoffman, Quinnipiac University

Poster: Correlating ACM Core IT Learning Outcomes with Associate Degree and Certificate Programs

Cara Tang, Portland Community College

Cindy Tucker, Bluegrass Community and Technical College

Elizabeth Hawthorne, Union County College

Poster: Madeup: A Language for Making Things Up

Chris Johnson, University of Wisconsin, Eau Claire

Peter Bui, University of Wisconsin, Eau Claire

Poster: Student Discovery of Network Security Ethics

Alisa Neeman, University of Rio Grande

Michael Snider, University of Rio Grande

Allen Hudson, University of Rio Grande

Poster: Extending SQL Auto-Grading to DML and DDL Statements

Carsten Kleiner, University of Applied Sciences&Arts Hannover

Felix Heine, University of Applied Sciences&Arts Hannover

Bastian Fischer, University of Applied Sciences&Arts Hannover

Poster: Conflict-Driven Cooperative-Learning in Computing Courses

Swaroop Joshi, The Ohio State University

Neelam Soundarajan, The Ohio State University

Rajiv Ramnath, The Ohio State University

Poster: A Nearest Neighbors Analysis of Student Academic Performance in Computer Science

R. Mitchell Parry, Appalachian State University

Poster: Integrating Mobile Computing and Security into a Computer Science Curriculum

Xiaohong Yuan, North Carolina A&T State University

Kelvin Bryant, North Carolina A&T State University

Kenneth Williams, North Carolina A&T State University

Jinsheng Xu, North Carolina A&T State University

Poster: The Effects of Formal Undergraduate Research Experiences on Student Aspirations for Graduate Study in Computer Science: Explaining the Relative Influence of Racial Identity Status

Ama Nyame-Mensah, Computing Research Association, Center for Evaluating the Research Pipeline

Poster: CSteach: Engaging Latino/a Youth in Computer Science with Social Justice and Near Peers

Louise Ann Lyon, ETR

Jill Denner,

Jacob Martinez, Digital NEST

Poster: Security Injections 2.0: Using Segmentation, Instant-feedback, and Auto-grading to Enhance Secure Coding Modules for Lower-level Programming Courses

Sagar Raina, Towson University

Blair Taylor, Towson University

Siddharth Kaza, Towson University

Poster: Conceptum: An Online Infrastructure for Concept Inventories

Gautam Mohan, Swarthmore College

Benjamin Rempel, Oberlin College

Eli Rosenberg, Oberlin College

David Wurtele, Swarthmore College

Cynthia Taylor, Oberlin College

Kevin Webb, Swarthmore College

Poster: Raspberry HadoopPI: A Low-Cost, Hands-On Laboratory in Big Data and Analytics

Kenneth Fox, Drexel University College of Computing and Informatics

William Mongan, Drexel University College of Computing and Informatics

Jeffrey Popyack, Drexel University College of Computing and Informatics

Poster: The State of CS Circles: Open Source and Outreach with an Introductory Python Website

David Pritchard, University of Southern California

Poster: Building the Pascaline: Digital Computing Like It's 1642

David Touretzky, Carnegie Mellon University

Poster: Using Workflow Technology to Create Scenario-based Workflows for Information Security Education

Wu He, Old Dominion University
Ashish Kshirsagar, Old Dominion University
Alexander Nwala, Old Dominion University
Yaohang Li, Old Dominion University

Poster: Gender Differences in High School Students' Decisions to Study Computer Science and Related Fields

Hai Hong, Google Inc.
Jennifer Wang, Google Inc.
Jason Ravitz, Google Inc.
Mo-Yun Lei Fong, Google Inc.

Poster: Learning from What Works: Improving an Introductory Computing Course for Architects with Teaching Methods from Media Computation

Nicholas Senske, University of North Carolina at Charlotte

Poster: MIPSUnit: A Unit Testing Framework for MIPS Assembly

Zachary Kurmas, Grand Valley State University
Jack Rosenhauer, Grand Valley State University

Poster: Poster Proposal: A Web-based Simulator for Learning Multiprocessor Real-time Scheduling

Yuting Zhang, Boston University Metropolitan College
Xin Shan, Boston University Metropolitan College
Yingyuan Zhang, Boston University Metropolitan College
Juejie Wang, Boston University Metropolitan College

Poster: Teaching Debugging Skills in Shader-Based Computer Graphics Programming

Ying Zhu, Georgia State University
G Scott Owen, Georgia State University

Poster: Developing Computational Thinking through Image Making and Constructionist Learning

Eileen Fordham, Grinnell College
Halley Freger, Grinnell College
Amanda Hinchman-Dominguez, Grinnell College
Alexander Mitchell, Grinnell College
Daniel Rebelsky, Grinnell College
Victoria Tsou, Grinnell College
Earnest Wheeler, Grinnell College
Zoe Wolter, Grinnell College
Samuel Rebelsky, Grinnell College

Poster: Smartwatches for CS education: exercising HCI, Usability Engineering and Software Engineering
Andrey Esakia, Virginia Tech

Poster: A Gateway Game to Make Computational Problem-Solving Accessible and Engaging
Emmett Tomai, University of Texas - Pan American
Roberto Flores, University of Texas - Pan American
Casey Richardson, University of Texas - Pan American
Jose Rojas, University of Texas - Pan American
Julio Oliva, University of Texas - Pan American
German Zuniga, University of Texas - Pan American

Poster: Oh, Snap! Enabling and Encouraging Success in CS1
Michael Ball, UC Berkeley
Lauren Mock, UC Berkeley
Jonathan McKinsey, UC Berkeley
Zachary Machardy, UC Berkeley
Omoju Miller, UC Berkeley
Daniel Garcia, UC Berkeley
Nathaniel Titterton, UC Berkeley
Brian Harvey, UC Berkeley

FRIDAY 3:45 PM - 5:00 PM**Papers: CS Education Research (room: 2502A)****Fri 3:45 PM - 5:00 PM**

3:45 PM Correlation of Topic Model and Student Grades Using Comment Data Mining
shaymaa sorour, Kyushu university
Kazumasa Goda, Kyushu Institute of Information Science
Tsunenori Mine, Kyushu university

4:10 PM Bats, Balls, and Lures: Cognitive Style in CS Education
Barry Wittman, Elizabethtown College
Jean Pretz, Elizabethtown College

4:35 PM SOLO Taxonomy for Assessing Novices' Algorithmic Design
David Ginat, Tel-Aviv University
Eti Menashe, Tel-Aviv University

Papers: Focus on K-12: Engaging Students (room: 3501C)**Fri 3:45 PM - 5:00 PM**

3:45 PM What Does It Take to Do Computer Programming? Surveying the K-12 Students' Conceptions
Antti-Jussi Lakanen, Mathematical Information Technology, University of Jyväskylä
Ville Isomöttönen, Mathematical Information Technology, University of Jyväskylä

4:10 PM Engaging High School Students in Modeling and Simulation through Educational Media
David Musicant, Carleton College
S. Selcen Guzey, Purdue University

4:35 PM An Analysis of User Engagement in Relation to Computing Workshop Activities
Rachel Menzies, University of Dundee
Michael Crabb, University of Dundee
Daniel Herron, University of Dundee
Karen Petrie, University of Dundee
Craig Stewart, University of Dundee
Mark Zarb, Robert Gordon University

Papers: Testing: Tools & Techniques (room: 3501E)**Fri 3:45 PM - 5:00 PM**

- 3:45 PM Unci: a C++-based Unit-testing Framework for Intro Students
Don Blaheta, Longwood University
- 4:10 PM Bug Infestation! A Goal-Plan Analysis of CS2 Students' Recursive Search Tree Solutions
Laurie Murphy, Pacific Lutheran University
Sue Fitzgerald, Metropolitan State University
Scott Grissom, Grand Valley State University
Renée McCauley, College of Charleston
- 4:35 PM Ante Up: A Framework to Strengthen Student-Based Testing of Assignments
Michael Bradshaw, Centre College

Papers: Soft Skills: Teamwork (room: 2503A)**Fri 3:45 PM - 5:00 PM**

- 3:45 PM On the Evaluation of Student Team Software Development Projects
Anya Tafliovich, University of Toronto Scarborough
Andrew Petersen, University of Toronto Mississauga
Jennifer Campbell, University of Toronto
- 4:10 PM An Experience Report at Teaching Group Based Agile Software Engineering Teams
Craig Anslow, University of Calgary
Frank Maurer, University of Calgary
- 4:35 PM An Experience Report: Using Mobile Development To Teach Software Design
Jennifer Campbell, University of Toronto
Anya Tafliovich, University of Toronto Scarborough

Lightning Talks (room: 3501D)	Fri 3:45 PM - 5:00 PM
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Montessori Methods + A Living Textbook > Traditional Computer Science Instruction

Nicole Anderson, Winona State University

Tim Gegg-Harrison, Winona State University

coaster: Teaching Computer Graphics Incrementally

Robert R. Lewis, Washington State University, Tri-Cities

Hugging & Bridging: What it is and why you should be doing it!

Shuchi Grover, Stanford University

Making Computer Science a First-Class Object in the K-12 Next Generation Science Standards

Marie Bienkowski, SRI International

Launching CROMA: Computational Research On Music & Audio

David Heise, Lincoln University

Integrating Programming into Physics and Algebra Courses

Eric Freudenthal, University of Texas at El Paso

Kien Lim, University of Texas at El Paso

Karla Carmona, University of Texas at El Paso

Catherine Tabor, El Paso Education Initiative

HFOSS-Lite in CS 2: Incorporating the Ushahidi Crowdmapping Program in a Data Structures and Algorithms Course

Samuel Rebelsky, Grinnell College

A Peer Tutoring Model for Small Schools with Limited Funding and Resources

Dee Weikle, Eastern Mennonite University

An Across-Institution Anytime MOOC in Database

Douglas Fisher, Vanderbilt University

The Need for Voices in CS to Address the #GamerGate Controversy

Joseph Kendall-Morwick, Capital University

Learning Computer Networking Through Illustration

Wen-Jung Hsin, Park University

Special Session (room: 3501G)**Fri 3:45 PM - 5:00 PM**

Perspectives on Adopting and Facilitating Guided Inquiry Learning

*Helen Hu, Westminster College**Clifton Kussmaul, Muhlenberg College**Deepa Muralidhar, Atlanta Girls School**Kristine Nagel, Georgia Gwinnett College***Special Session (room: 2505A)****Fri 3:45 PM - 5:00 PM**

Introduction to AccessCS10K and Accessible Tools for Teaching Programming

*Andreas Stefik, University of Nevada, Las Vegas**Richard Ladner, University of Washington***Panel (room: 3501H)****Fri 3:45 PM - 5:00 PM**

One-Day Activities for K-12 Face-to-Face Outreach

*Daniel D. Garcia, UC Berkeley**Wei Ding, University of Massachusetts, Boston**Joseph Cohen, University of Massachusetts, Boston**Barbara Ericson, Georgia Institute of Technology**Jeff Gray, University of Alabama**Dale Reed, University of Illinois at Chicago***Supporter Session (room: TBA)****Fri 3:45 PM - 5:00 PM**

GitHub

FRIDAY 7:00 PM - 10:00 PM**Workshops**

Workshop #8: A Swift Introduction to Swift App Development (room: 2502A)

*Michael Rogers, Northwest Missouri State University**Bill Siever, Western Illinois University*

Workshop #9: Conducting educational research in the computer science classroom: Choosing the appropriate research design to address your research questions. (room: 3501H)

Aman Yadav, Michigan State University

Workshop #10: Pencil Code: Bridging the Gap between Visual and Text-based CS Education (room: 2502B)

*David Bau, Google**Matthew Dawson, Google**Anthony Bau, Phillips Exeter Academy*

Workshop #11: Teaching Cryptography and Access Control Hands-on (room: 3501E)

*Steve Carr, Western Michigan University**Melissa Keranen, Michigan Technological University**Jean Mayo, Michigan Technological University*

Workshop #12: Bridging the Divide: Developing Culturally-Responsive Curriculum for K-12

Computer Science Education (room: 2503B)

*A. Nicki Washington, Howard University**Legand Burge, Howard University**Marlon Mejias, Howard University**Ketly Jean-Pierre, Howard University**Qi'Anne Knox, Howard University*

Workshop #13: On Beyond Sudoku: Pencil Puzzles for Introductory Computer Science (room: 2504A)

*Zack Butler, Rochester Institute of Technology**Ivona Bezakova, Rochester Institute of Technology*

Workshop #14: How to Plan and Run Summer Computing Camps - Logistics (room: 2505B)

*Marguerite Doman, Winthrop University**Barbara Ericson, Georgia Institute of Technology**Kristine Nagel, Georgia Gwinnett College**Nannette Napier, Georgia Gwinnett College**Krishnendu Roy, Valdosta State University*

Workshop #15: Small or Liberal Arts Colleges Adapting to CS2013: Making It Work (room: 3501C)

*Andrea Danyluk, Williams College**Michael Jipping, Hope College**Rhys Price Jones, Wellesley College**David Reed, Creighton University**Brad Richards, University of Puget Sound**Richard Wicentowski, Swarthmore College*

Workshop #16: Steal This Courseware: FOSS, Github, Flask, and OpenShift (room: 2503A)

*Stephen Jacobs, RIT Center for Media, Arts, Games, Interaction and Creativity**(MAGIC)**Remy DeCausemaker, RIT Center for Media, Arts, Games, Interaction and Creativity**(MAGIC)*

Workshop #17: The Internet, Creativity and Global Impact: Curriculum Modules for the new AP Computer Science Principles course (room: 3501D)

*Lien Diaz, College Board, Advanced Placement Program**Richard Kick, Newbury Park High School**Andrew Kuemmel, Madison West High School*

Workshop #18: Games, Phones, and Programming in the Classroom (room: 3501G)

*Veronica Catete, NC State University**Barry Peddycord III, NC State University**Tiffany Barnes, NC State University*

Workshop #19: Infusing Cooperative Learning into Early Computer Science Courses to Support Improved Engagement (room: 3501F)

*Jeff Gray, University of Alabama**Fran Trees, Rutgers University**Owen Astrachan, Duke University*

SATURDAY 9:00 AM - 10:15 AM**Papers: Testing: Student Programming Errors (room: 2502A)****Sat 9:00 AM - 10:15 AM**

9:00 AM 37 Million Compilations: Investigating Novice Programming Mistakes in Large-Scale Student Data
Amjad Altadmri, University of Kent
Neil C. C. Brown, University of Kent

9:25 AM Looking Glass: A C++ Library for Testing Student Programs through Reflection
Scott Turner, UNC Pembroke

9:50 AM Checked Coverage and Object Branch Coverage: New Alternatives for Assessing Student-Written Tests
Zalia Shams, Virginia Tech
Stephen Edwards, Virginia Tech

Papers: Focus on K-12: Elementary (room: 3501C)**Sat 9:00 AM - 10:15 AM**

9:00 AM Using SOLO to Classify the Programming Responses of Primary Grade Students
Linda Seiter, John Carroll University

9:25 AM Floors and Flexibility: Designing a programming environment for 4th-6th grade classrooms
Charlotte Hill, UC Santa Barbara
Hilary Dwyer, UC Santa Barbara
Tim Martinez, UC Santa Barbara
Danielle Harlow, UC Santa Barbara
Diana Franklin, UC Santa Barbara

9:50 AM Getting Started Teaching and Researching Computer Science in the Elementary Classroom
Diana Franklin, UC Santa Barbara
Charlotte Hill, UC Santa Barbara
Hilary Dwyer, UC Santa Barbara
Ashley Iveland, UC Santa Barbara
Alexandria Killian, UC Santa Barbara
Danielle Harlow, UC Santa Barbara

Papers: Non-majors/Interdisciplinary (room: 2503A)		Sat 9:00 AM - 10:15 AM
9:00 AM	Improving Non-CS Major Performance in CS1 <i>Victor Norman, Calvin College</i> <i>Joel Adams, Calvin College</i>	
9:25 AM	Can We "Flip" Non-Major Programming Courses Yet? <i>Douglas Baldwin, SUNY Geneseo</i>	
9:50 AM	Evaluating Pair-Programming for Non-Computer Science Major Students <i>Clem O'Donnell, University of Limerick</i> <i>Jim Buckley, University of Limerick</i> <i>Abdulhussain Mahdi, University of Limerick</i> <i>John Nelson, University of Limerick</i> <i>Michael English, University of Limerick</i>	
Papers: Focus on K-12: Outreach/Summer Camps (room: 3501D)		Sat 9:00 AM - 10:15 AM
9:00 AM	From 9 to 90: Engaging Learners of All Ages <i>Allison Sauppé, University of Wisconsin–Madison</i> <i>Daniel Szafir, University of Wisconsin–Madison</i> <i>Chien-Ming Huang, University of Wisconsin–Madison</i> <i>Bilge Mutlu, University of Wisconsin–Madison</i>	
9:25 AM	A Socio-Cognitive Analysis of Summer Camp Outcomes and Experiences <i>Chulakorn Aritajati, The Pennsylvania State University, College of IST</i> <i>Mary Beth Rosson, The Pennsylvania State University, College of IST</i> <i>Joslenne Pena, The Pennsylvania State University, College of IST</i> <i>Dana Cinque, The Pennsylvania State University, College of IST</i> <i>Ana Segura, University of Houston-Downtown</i>	
9:50 AM	Computational Bead Design: A Pilot Summer Camp in Computer Aided Design and 3D Printing for Middle School Girls <i>Courtney Starrett, Winthrop University</i> <i>Marguerite Doman, Winthrop University</i> <i>Chlotia Garrison, Winthrop University</i> <i>Merry Sleigh, Winthrop University</i>	
Student Research Competition - undergraduate (room: 2502B)		Sat 9:00 AM - 10:15 AM
Student Research Competition - graduate (room: 2503B)		Sat 9:00 AM - 10:15 AM

Special Session (room: 3501G)**Sat 9:00 AM - 10:15 AM**

Big Data in Computer Science Education Research

*Orit Hazzan, Technion – Israel Institute of Technology**Clifford Shaffer, Virginia Tech***Special Session (room: 2505A)****Sat 9:00 AM - 10:15 AM**

Scaling High School Computer Science: Exploring Computer Science and Computer Science

Principles

*Owen Astrachan, Duke University**Ralph Morelli, Trinity College**Jeff Gray, University of Alabama**Gail Chapman, UCLA***Panel (room: 2505B)****Sat 9:00 AM - 10:15 AM**

SPOCs: What, Why, and How

*Janet Burge, Wesleyan University**Armando Fox, UC Berkeley**Dan Grossman, University of Washington**Gerald Roth, Vanderbilt University**Joe Warren, Rice University***Panel (room: 3501H)****Sat 9:00 AM - 10:15 AM**

Technology We Can't Live Without!

*Daniel D. Garcia, UC Berkeley**Eric Allatta, Academy for Software Engineering**Manuel Pérez-Quinones, Virginia Tech**Jeff Solin, Lane Tech College Prep High School***Supporter Session (room: TBA)****Sat 9:00 AM - 10:15 AM**

TBA

SATURDAY 10:15 AM - 10:45 AM
Break, Exhibits & Demos

Demo: JavaTutor: An Intelligent Tutoring System that Adapts to Cognitive and Affective States during Computer Programming

Joseph Wiggins, North Carolina State University
Kristy Boyer, North Carolina State University

Demo: MIST - The Mathematical Image Synthesis Toolkit

Eileen Fordham, Grinnell College
Halley Freger, Grinnell College
Amanda Hinchman-Dominguez, Grinnell College
Alexander Mitchell, Grinnell College
Daniel Rebelsky, Grinnell College
Victoria Tsou, Grinnell College
Earnest Wheeler, Grinnell College
Zoe Wolter, Grinnell College
Samuel Rebelsky, Grinnell College

SATURDAY 10:45 AM - 12:00 PM

Papers: Teaching Practices (room: 2502A)

Sat 10:45 AM - 12:00 PM

10:45 AM Insights into Teaching and Learning: Reflections on MOOC Experiences
Janet Burge, Wesleyan University

11:10 AM What Influences CS Faculty to Adopt Teaching Practices?
Lecia Barker, University of Texas at Austin
Gruning Jane, University of Texas at Austin
Christopher Lynnly Hovey, Northeastern University

11:35 AM Personalized Attention @ Scale - Talk isn't Cheap, but it's effective
Dirk Grunwald, University of Colorado
Elizabeth Boese, University of Colorado
Rhonda Hoenigman, University of Colorado
Andy Sayler, University of Colorado
Judy Stafford, University of Colorado

Papers: Focus on K-12: Miscellaneous topics (room: 3501C)

Sat 10:45 AM - 12:00 PM

- 10:45 AM Transferring Skills at Solving Word Problems from Computing to Algebra through Bootstrap
Emmanuel Schanzer, Harvard Graduate School of Education
Kathi Fisler, WPI Computer Science
Shriram Krishnamurthi, Brown University Computer Science
Matthias Felleisen, Northeastern University College of Computer and Information Science
- 11:10 AM A Practical Guide to Developing and Validating Computer Science Knowledge Assessments with Application to Middle School
Philip Buffum, North Carolina State University
Eleni Lobene, North Carolina State University
Megan Frankosky, North Carolina State University
Kristy Boyer, North Carolina State University
Eric Wiebe, North Carolina State University
James Lester, North Carolina State University
- 11:35 AM Reactive Game Engine Programming for STEM Outreach
Alan Cleary, Montana State University
Lucas Vandenbergh, Western State Colorado University
John Peterson, Western State Colorado University

Papers: Computers & Society (room: 2503A)

Sat 10:45 AM - 12:00 PM

- 10:45 AM Building CS Research Capacity in sub-Saharan Africa by Implementing a Doctoral Training Program
Mikko Apiola, University of Eastern Finland
Jarkko Suhonen, University of Eastern Finland
Abbi Nangawe, College of Business Education
Erkki Sutinen, University of Eastern Finland
- 11:10 AM Engaging Non-Traditional Students in Computer Science through Socially-Inspired Learning and Sustained Mentoring
Jennifer Burg, Wake Forest University
Paul Pauca, Wake Forest University
William Turkett, Wake Forest University
Fulp Errin, Wake Forest University
Samuel Cho, Wake Forest University
Santiago Peter, Wake Forest University
Daniel Canas, Wake Forest University
H. Donald Gage, Wake Forest University
- 11:35 AM How much impact can be made in a week? Designing Effective International Service Learning Projects for Computing
Grace Ngai, Hong Kong Polytechnic University
Stephen C.F. Chan, Hong Kong Polytechnic University

Papers: Beyond CS2: Networking/Security (room: 3501D)**Sat 10:45 AM - 12:00 PM**

- 10:45 AM Lowering the Barrier to Systems-level Networking Projects
Joel Sommers, Colgate University
- 11:10 AM A Simple Laboratory Environment for Real-World Offensive Security Education
Maxim Timchenko, Boston University
David Starobinski, Boston University
- 11:35 AM An Educational Networking Framework for Full Layer Implementation and Testing
Keunhong Lee, KAIST
Joongi Kim, KAIST
Sue Moon, KAIST

Special Session (room: 3501G)**Sat 10:45 AM - 12:00 PM**

- The CS Concept Inventory Quiz Show
Nafeesa Dewji, University of British Columbia
Steven Wolfman, University of British Columbia
Geoffrey Herman, University of Illinois at Urbana-Champaign
Leo Porter, University of California, San Diego
Cynthia Taylor, Oberlin College
Jan Vahrenhold, Westfälische Wilhelms-Universität Münster

Panel (room: 2505A)**Sat 10:45 AM - 12:00 PM**

- Bringing Grades K-5 to the Mainstream of Computer Science Education
Katie Apone, Code.org
Marina Bers, Tufts University
Karen Brennan, Harvard University
Diana Franklin, UC Santa Barbara
Maya Israel, University of Illinois at Urbana Champaign
Pat Yongpradit, Code.org

Special Session (room: 3501H)	Sat 10:45 AM - 12:00 PM
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Nifty Assignments

*Nick Parlante, Stanford University**Julie Zelenski, Stanford University**Suzanne Matthews, United States Military Academy**David Raymond, Army Cyber Institute**Peter-Michael Osera, University of Pennsylvania**Stuart Reges, University of Washington**Luther Tychonievich, University of Virginia**Mark Sherriff, University of Virginia**Ryan Layer, University of Virginia**Josh Hug, UC Berkeley**Marty Stepp, Stanford University**Allison Obourn, University of Washington*

Supporter Session (room: TBA)	Sat 10:45 AM - 12:00 PM
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TBA

SATURDAY 12:00 PM - 2:00 PM**Luncheon****Keith Hampton, Associate Professor, Rutgers University****SATURDAY 3:00 PM - 6:00 PM****Workshops**

Workshop #20: Computer Science Principles with EarSketch (room: 3501E)

Jason Freeman, Georgia Institute of Technology

Brian Magerko, Georgia Institute of Technology

Douglas Edwards, Georgia Institute of Technology

Regis Verdin, Georgia Institute of Technology

Workshop #21: Teaching Computing with Processing, the Bridge between High School and College (room: 3501F)

Aaron Cadle, Arlington ISD

Ira Greenberg, Southern Methodist University

Deepak Kumar, Bryn Mawr College

Darby Thompson, Sidwell Friends School

Ursula Wolz, RiverSound Solutions

Dianna Xu, Bryn Mawr College

Workshop #22: Supporting new Adopters to Peer Instruction in Computing (room: 2502A)

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 #23: Reviewing NSF Proposals: Learn about Effective Proposal Writing via the Review Process (room: 2502B)

Paul Tymann, National Science Foundation

Michael Erlinger, National Science Foundation

Workshop #24: Creating Stimulating, Relevant, and Manageable Introductory Computer Science Projects that Utilize Real-Time, Large, Web-Based Datasets (room: 2503A)

Eli Tilevich, Dept. of Computer Science, Virginia Tech

Clifford Shaffer, Dept. of Computer Science, Virginia Tech

Austin Cory Bart, Dept. of Computer Science, Virginia Tech

Workshop #25: Building Code Magnet Labs for Tablets and Other Devices (room: 2503B)

Barry Kurtz, Appalachian State University
Rahman Tashakkori, Appalachian State University
Ahmad Esmaili, Stony Brook University

Workshop #26: Introducing Secure Coding in CS0, CS1, and CS2 (room: 2504A)

Siddharth Kaza, Towson University
Blair Taylor, Towson University
Elizabeth Hawthorne, Towson University

Workshop #27: Puzzle-Based Learning: Introducing Creative Thinking and Problem Solving for Computer Science and Engineering (room: 2505B)

Raja Sooriamurthi, Carnegie Mellon University
Nickolas Falkner, University of Adelaide
Ed Meyer, Baldwin Wallace University
Zbigniew Michalewicz, University of Adelaide

Workshop #28: KELP CS and LaPlaya: A computational thinking curriculum and development environment for 4th – 6th grade (room: 3501C)

Diana Franklin, UC Santa Barbara
Charlotte Hill, UC Santa Barbara
Hilary Dwyer, UC Santa Barbara

Workshop #29: Teaching Privacy: What Every Student Needs to Know (room: 3501D)

Gerald Friedland, International Computer Science Institute
Serge Egelman, International Computer Science Institute
Daniel Garcia, UC Berkeley

Workshop #30: Decoding CS Principles - A Curriculum from Code.org (room: 3501G)

Baker Franke, Code.org
Brook Osborne, Code.org