



...the schedule may change, some sessions may move...

Inspire, Innovate, Improve! March 8th - 11th, Seattle, Washington, USA

SIGCSE 2017 welcomes colleagues from around the world to present demos, lightning talks, papers, panels, posters, special sessions, and workshops, and to discuss computer science education in birds-of-a-feather sessions and informal settings. The SIGCSE Technical Symposium addresses problems common among educators working to develop, implement and/or evaluate computing programs, curricula, and courses. The symposium provides a forum for sharing new ideas for syllabi, laboratories, and other elements of teaching and pedagogy, at all levels of instruction.



| Day / Time | Theme | Topic | Track | Title | Authors |
|---------------------------------|---------------------------------------|---------------------------|--------------------|---|--|
| | K-12 / Novice Learners | | Paper | Assessing Children's Understanding of the Work of Computer Scientists: The Draw-a-Computer-Scientist Tes | Alexandria K. Hansen, Hilary Dwyer, Ashley Iveland, Mia tTalesfore, Lacy Wright, Danielle Harlow and Diana Franklin |
| | | Computational Thinking | Paper | Assessing Computational Thinking in CS Unplugged Activities | Brandon Rodriguez, Cyndi Rader and Tracy Camp |
| | | | Paper | Designing CS Resource Sharing Sites for All Teachers | Mackenzie Leake and Colleen M. Lewis |
| | | | Paper | Making Robot Challenges with Virtual Robots | Kevin J. Gucwa and Harry H. Cheng |
| | Diversity | Robots & Wearables | Paper | A Modern Wearable Devices Course for Computer Science Undergraduates | Chris Gregg, Raewyn Duvall and Kate Wasynczuk |
| | | | Paper | Applying End-User Robot-Programming Tools to Compute Science Outreach | Vivek Paramasivam, Sarah Elliott, Justin Huang and Maya Cakmak |
| | | | Paper | Measuring Student Learning in Introductory Block-Based Programming: Examining Misconceptions of Loops, Variables, and Boolean Logic | Shuchi Grover and Satabdi Basu |
| | CS1 | Novice Learners | Paper | Variable Evaluation: An Exploration of Novice Programmers' Understanding and Common Misconceptions | Tobias Kohn |
| Thu Manch Oth | | | Paper | Semantic Reasoning in Young Programmers | David Touretzky, Christina Gardner-Mccune and Ashish Aggarwal |
| Thu March 9th 10:45am - noon | Advanced Topics | Data | Paper | Teaching Big Data and Cloud Computing with a Physical Cluster | Jesse Eickholt and Sharad Shrestha |
| | | | Paper | Computing with CORGIS: Diverse, Real-world Datasets for Introductory Computing | Austin Bart, Ryan Whitcomb, Eli Tilevich, Dennis Kafura and Cliff Shaffer |
| | | | Paper | Introducing Data Science to School Kids | Shashank Srikant and Varun Aggarwal |
| | Learning / Instructional styles | Analytics Pap | Paper | and Computer Science Learning | Mickey Vellukunnel, Philip Buffum, Kristy Elizabeth Boyer, Jeffrey Forbes, Sarah Heckman and Ketan Mayer-Patel |
| | | | Paper | Using Programming Process Data to Detect Differences in Students' Patterns of Programming | |
| | | | Paper | Investigating Student Plagiarism Patterns and Correlation to Grades | S Jonathan Pierce and Craig Zilles |
| | | CS FOR ALL | Panel | The Role of CS Departments in The US President's "CS for All" Initiative | Mark Guzdial, Barbara Ericson, W. Richards Adrion and Dianne O'Grady-Cunniff |
| | | FOSS | Panel | Community Engagement with Free and Open Source Software | Christian Murphy, Kevin Buffardi, Josh Dehlinger, Lynn Lambert and Nanette Veilleux |
| | | CS1 | Special Session | CS1: Beyond Programming | Jessen Havill, Douglas Baldwin, Valerie Barr, Amy Briggs, Bruce Maxwell and Henry Walker |
| | | ED RESEARCH | Special Session | CS Education Research Knowledge Forum | Kelsey Finkel, Kenneth Graves and Leigh Ann Delyser |

| Day / Time | Theme | Topic | Track | Title | Authors |
|-------------------------------|---------------------------------------|-------------------------------------|--------------------|---|--|
| | K-12 / Novice Learners | K-12 Professional Development | Paper | Reflecting on Three Offerings of a Community-Centric MOOC for K-6 Computer Science Teachers | Katrina Falkner, Rebecca Vivian and Nick Falkner |
| | | | Paper | Preparing STEM Teachers to offer [course name removed |]rene Lee, Maureen Psaila Dombrowski and Ed Angel |
| | | | Paper | A Comparative Analysis of Online and Face-to-Face Professional Development Models for CS Education | David Webb, Hilarie Nickerson and Jeffrey Bush |
| | | | Paper | Toward Computational Making with Madeup | Chris Johnson |
| | Diversity | Making | Paper | Understanding High School Students' Reading, Remixing, and Writing Codeable Circuits for Electronic Textiles | Yasmin Kafai, Breanne Litts, Debora Lui, Justice Walker and Sari Widman |
| | | | Paper | "Creating cool stuff": Pupils' experience of the BBC micro: bit | Sue Sentance, Jane Waite, Steve Hodges, Emily MacLeod and Lucy Yeomans |
| | | | Paper | Gamifying Course Modules for Entry Level Students | Yin Pan, Sumita Mishra and David Schwartz |
| | CS1 | Addressing Motivation | Paper | Improving Students' Learning and Achievement in CS Classrooms through Computational Creativity Exercises that Integrate Computational and Creative Thinking | Duane Shell, Leen-Kiat Soh, Abraham Flanigan, Markeya Peteranetz and Elizabeth Ingraham |
| | | | Paper | Getting students to earnestly do reading, studying, and homework in an introductory programming class | Alex Edgcomb, Frank Vahid, Roman Lysecky and Susan Lysecky |
| Thu March 9th 1:45pm - 3pm | Advanced Topics | Architecture | Paper | Impact of Prior Exposure to the PLP Instruction Set Architecture in a Computer Architecture Course | Sohum Sohoni and Scotty Craig |
| 1.40pm - 0pm | | | Paper | A Collaborative Approach to Teaching Software Architecture | Arie van Deursen, Maurício Aniche, Joop Aué, Rogier Slag, Michael de Jong, Alex Nederlof and Eric Bouwers |
| | | | Paper | MIPSUnit: A Unit Testing Framework for MIPS Assembly | Zachary Kurmas |
| | Learning / Instructional styles | Performance Analytics | Paper | Using Learning Analytics to Investigate Patterns of Performance and Engagement in Large Classes | Hassan Khosravi and Kendra Cooper |
| | | | Paper | Automatically Classifying Students in Need of Support by Detecting Changes in Programming Behaviour | Anthony Estey, Hieke Keuning and Yvonne Coady |
| | | | Paper | Evaluating Neural Networks as a Method for Identifying Students in Need of Assistance | Karo Castro-Wunsch, Alireza Ahadi and Andrew Petersen |
| | | ER | Panel | We've Grown Our Female Undergraduate Enrollment in Computer Science: You Can Too | Wendy Dubow, Ignatios Vakalis, Amber Benton and Helen Hi |
| | | CS FOR ALL | Panel | Building CS Teaching Capacity: Comparing Strategies for Achieving Large Scale Impact | Carol Fletcher, Leigh Ann Delyser, Anthony Owen and Kimberly Hughes |
| | | ACCESSIBILIT Y | Special Session | Teaching Accessibility | Richard Ladner and Matt May |
| | | INDUSTRY | Special Session | Holistic Development of Underrepresented Students through Academic – Industry Partnerships | Marlon Mejias, Legand Burge, Kamar Galloway, Kinnis Gosha and Jean Muhammad |

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|---------------|---------------------------------------|----------------------------|--------------------|---|--|
| | K-12 / Novice Learners | CS for All | Paper | Pre-College Computing Outreach Research: Towards Improving the Practice | Adrienne Decker and Monica M McGill |
| | | | Paper | Visions of Computer Science Education: Unpacking Arguments for and Projected Impacts of CS4All Initiatives | Sara Vogel, Rafi Santo and Dixie Ching |
| | | | Paper | Defining a Discipline or Shaping a Community: Constraints on Broadening Participation in Computing | Joanna Weidler-Lewis, Wendy Dubow and Alexis Kaminsky |
| | | | Paper | From blocks to text and back: Programming patterns in a dual-modality environment | David Weintrop and Nathan Holbert |
| | Diversity | Blocks Programming | Paper | | Brian Broll, Akos Ledeczi, Peter Volgyesi, Janos Sallai, Alexia Carrillo, Chris Vanags, Joshua Swartz, Stephanie Weeden-Wright and Melvin Lu |
| | | | Paper | Using Upper-Elementary student performance to understand conceptual sequencing in a blocks-based Curriculum | Diana Franklin, Gabriela Skifstad, Reiny Rolock, Isha Mehrotra, Valerie Ding, Alexandria Hansen, David Weintrop and Danielle Harlow |
| | CS1 | Collaborative Exams | Paper | rests in introductory Computing | Yingjun Cao and Leo Porter |
| | | | Paper | In-Lab Programming Tests in a Data Structures Course in C for Non-Specialists | Edwin Knorr and Christopher Thompson |
| Thu March 9th | | | Paper | Interactions of Individual and Pair Programmers with an Intelligent Tutoring System for Computer Science | Rachel Harsley, Davide Fossati, Barbara Di Eugenio and Nicl Green |
| 3:45pm - 5pm | Advanced Topics | Beginning Cybersecurity | Paper | An Interdisciplinary Non-majors Course: Cybersecurity for Future Presidents | Aparna Das, David Voorhees, Cynthia Choi and Carl Landwehr |
| | | | Paper | Scenario-Based Inquiry for Engagement in General Education Computing | David Kerven, Kristine Nagel, Stella Smith, Sherly Abraham and Laura Young |
| | | | Paper | Capture the Flag Unplugged: An Offline Cyber Competition | Vitaly Ford, Ambareen Siraj, Ada Haynes and Eric Brown |
| | Learning / Instructional styles | Feedback F | Paper | Generating hints and feedback for Hilbert-style axiomatic proofs | Josje Lodder, Bastiaan Heeren and Johan Jeuring |
| | | | Paper | Infrastructure for Continuous Assessment of Retained Relevant Knowledge | Kathleen Timmerman and Travis Doom |
| | | | Paper | Do Enhanced Compiler Error Messages Help Students? Results Inconclusive. | Raymond Pettit, John Homer and Roger Gee |
| | | BPC | Special Session | Broadening Participation in Computer Science: Key Strategies from International Findings | Rebecca Vivian, Katrina Falkner and Claudia Szabo |
| | | CSP | Panel | Teaching the Global Impact of Computing | Jeff Gray, Jennifer Rosato, Bradley Beth and Nigamanth Sridhar |
| | | AUTOGRADIN G | Panel | | John Denero, Sumukh Sridhara, Manuel Pérez-Quiñones, Aatish Nayak and Ben Leong |
| | | ARTS | Special Session | Computing in the Arts: Curricular Innovations and Results | Renee McCauley, Bill Manaris, David Heise, Cate Sheller, Jennifer Jolley and Alan Zaring |

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|----------------------------------|----------------------|---------------------------|--------------------|---|--|
| | | K-8 | Paper | Covering Edge Cases: An Analysis of Computer Science Learning Goals Theorized and Tested in Literature | Kathryn Rich, Carla Strickland and Diana Franklin |
| | K-12 / Novice | | Paper | Evaluating the Effect of Using Physical Manipulatives to Foster Computational Thinking in Elementary School | Ashish Aggarwal, Christina Gardner-Mccune and David Touretzky |
| | Learners | | Paper | Arts Coding for Social Good: A Pilot Project for Middle-School Outreach | Anita Dewitt, Julia Fay, Madeleine Goldman, Eleanor Nicolson, Linda Oyolu, Lukas Resch, Jovan Saldaña, Soulideth Sounalath, Tyler Williams, Kathryn Yetter, Elizabeth Zak, Narren Brown and Samuel Rebelsky |
| | | | Paper | Just the Numbers: An Investigation of Contextualization of Problems for Novice Programmers | Ellie Lovellette, John Matta, Dennis Bouvier and Roger Frye |
| | Diversity | Novice Programmers | Paper | An Empirical Study of Debugging Patterns Among Novices Programmers | Basma Alqadi and Jonathan Maletic |
| | | | Paper | iSnap: Towards Intelligent Tutoring in Novice Programmir Environments | gThomas Price, Yihuan Dong, Dragan Lipovac and Tiffany Barnes |
| | | | Paper | POGIL Activities in Data Structures: What do Students Value? | Tammy Vandegrift |
| | CS1 | Collaborative Learning | Paper | Student Perspectives of Team-Based Learning in a CS Course: Summary of Qualitative Findings | Michael Kirkpatrick |
| 5 : M l. 40/l. | | | Paper | Exploring the Pair Programming Process: Characteristics of Effective Collaboration | Fernando J. Rodríguez, Kimberly Michelle Price and Kristy Elizabeth Boyer |
| Fri March 10th 10:45am - noon | | Software Engineering | Paper | Innovative Pedagogical Approaches to a Capstone Laboratory Course in Cyber Operations | Mike O'Leary |
| | Advanced Topics | | Paper | A Study of the Use of a Reflective Activity in Learning Software Design | John Coffey |
| | | | Paper | Incorporating Human Error Education into Software Engineering Courses via Error-based Inspections | Vaibhav Anu, Gursimran Walia and Gary Bradshaw |
| | Learning / | | Paper | SAFE: Smart Authenticated Fast Exams for Student Evaluation in Classrooms | Kameswari Chebrolu, Bhaskaran Raman, Vinay Chandra Dommeti, Akshay Veer Boddu, Kurien Zacharia, Arun Babu and Prateek Chandan |
| | Instructional styles | | Paper | Choosing face-to-face or video-based instruction in a mobile app development course | Matthew Boutell |
| | , | | Paper | Creating Engaging Exercises with Mobile Response System (MRS) | Debzani Deb, Mohammad Fuad and Mallek Kanan |
| | | POGIL | Special Session | Converting Your Teaching (or Even Your Whole Department!) to Active Learning via POGIL | Helen H. Hu, Chris Mayfield and Janice L. Pearce |
| | | K-12 VOLUNTEERS | Panel | Volunteer Best Practices for K12 CS | Leigh Ann Delyser, Tom O'Connell, Maurya Couvares, Nathaniel Granorand Diane Levitt |
| | | SEMINAR COURSES | Panel | Computer Science Topics in First- and Second- Year Seminar Courses | Andrea Tartaro, Valerie Barr, Bryan Catron, Christopher Healy, Kate Lockwood, Anil Shende and Kevin Treu |
| | | LIBERAL ARTS | Special Session | Computing Education in Liberal Arts Colleges: A Status Report of the SIGCSE Committee | Doug Baldwin, Grant Braught and Amanda Holland-Minkley |

| Day / Time | Theme | Topic | Track | Title | Authors |
|----------------|---------------------------------------|--------------------------|--------------------|---|--|
| | K-12 / Novice Learners | AP CSP | Paper | From Professional Development to the Classroom: Findings from CS K-12 Teachers | Lori Pollock, Chrystalla Mouza, Amanda Czik, Alexis Little, Debra Coffey and Joan Buttram |
| | | | Paper | Preparing and Supporting Industry Professionals as Volunteer Computer Science Co-Instructors for HS | Anthony Papini, Leigh Ann Delyser, Nathaniel Granor and Kevin Wang |
| | | | Paper | Getting Principled: Reflections on Teaching CS Principles at Two College Board University Pilots | Jeff Gray, Michele Roberts and Jonathan Corley |
| | | 0 | Paper | Making Noise: Using Sound-Art to Explore Technological Fluency | Erik Brunvand and Nina McCurdy |
| | Diversity | Computers and Music | Paper | Creativity in Authentic STEAM Education with EarSketch | Shelly Engelman, Brian Magerko, Tom McKlin, Morgan Miller Doug Edwards and Jason Freeman |
| | | | Paper | Integrating Computer Science into Music Education | John Peterson and Greg Haynes |
| | | | Paper | Exam Wrappers: Not a Silver Bullet | Ben Stephenson, Michelle Craig, Daniel Zingaro, Diane Horton, Danny Heap and Elaine Huynh |
| | CS1 | CS1 | Paper | The Code Mangler: Evaluating Coding Ability Without Writing any Code | Brian Harrington and Nick Cheng |
| | | | Paper | Comparing Outcomes Across Different Contexts in CS1 | Bruce Maxwell and Stephanie Taylor |
| Fri March 10th | Advanced Topics | Algorithms | Paper | Evaluating the Effectiveness of Algorithm Analysis Visualizations | Mohammed F. Farghally, Kyuhan Koh, Hossameldin Shahin and Clifford A. Shaffer |
| 1:45pm - 3pm | | | Paper | Towards a Concept Inventory for Algorithm Analysis Topics | Mohammed F. Farghally, Kyuhan Koh, Jeremy V. Ernst and Clifford A. Shaffer |
| | | | Paper | Assessment of Introducing Algorithms with Video Lectures and Pseudocode Rhymed to a Melody | Ben Schreiber and John Dougherty |
| | Learning / Instructional styles | Peers & Large Classes | Paper | Micro-Classes: A Structure for Improving Student Experience in Large Classes | Christine Alvarado, Mia Minnes and Leo Porter |
| | | | Paper | Impact of Class Size on Student Evaluations for Traditional and Peer Instruction Classrooms | Soohyun Nam Liao, William Griswold and Leo Porter |
| | | | Paper | My Digital Hand: A Tool for Scaling Up One-to-One Peer Teaching in Support of Computer Science Learning | Aaron Smith, Kristy Elizabeth Boyer, Jeffrey Forbes, Sarah Heckman and Ketan Mayer-Patel |
| | | CS FOR ALL, K12 PD | Panel | CSPdWeek: A Scalable Model for Preparing Teachers for CS for All | Tracy Camp, Emmanuel Schanzer, Joanna Goode, Owen Astrachan and Ed Campos |
| | | UNDERGRAD RESEARCH | Panel | Bringing Undergraduate Research Experience in Non-R1 Institutions | Farzana Rahman, Helen Hu, Dennis Brylow and Clif Kussmaul |
| | | CC2020 | Panel | CC2020: A Vision on Computing Curricula | Alison Clear, John Impagliazzo, Allen Parrish, Gerrit Van Der Veer and Ming Zhang |
| | | ETHICS | Special Session | The Code of Ethics Quiz Show | Bo Brinkman and Keith Miller |

| Day / Time | Theme | Topic | Track | Title | Authors |
|----------------|---------------------------------------|--------------------|--------------------|--|---|
| | K-12 / Novice Learners | K-12 | Paper | Professional recognition matters: accreditation for inservice computer science teachers | Sue Sentance and Andrew Csizmadia |
| | | Professional | Paper | Building a Statewide Computer Science Teacher Pipeline | Helen Hu, Cecily Heiner, Thomas Gagne and Carl Lyman |
| | | Development | Paper | Teaching CS to CS Teachers: Addressing the Need for Advanced Content in K-12 Professional Development | Dan Leyzberg and Christopher Moretti |
| | | | Paper | Diversity Barriers in K-12 Computer Science Education: Structural and Social | Jennifer Wang and Sepehr Hejazi Moghadam |
| | Diversity | Diversity | Paper | Folk Pedagogy and the Geek Gene (or perhaps the Geekiness Quotient) | Kate Sanders, Jonas Boustedt, Anna Eckerdal, Robert McCartney and Carol Zander |
| | Diversity | | Paper | Examining the Relationship Between Introductory Computing Course Experiences, Self-Efficacy, and Belonging Among Women First-Generation College Students | Jennifer Blaney and Jane Stout |
| | | | Paper | Increasing The Capacity Of STEM Workforce: Minor in Bioinformatics | Sami Khuri, Miri Vanhoven and Natalia Khuri |
| | CS1 | Non-CS Students | Paper | Thinking Course for Architecture Students | Nick Senske |
| Fri March 10th | | | Paper | Examining the Enrollment Growth: Non-CS Majors in CS1 Courses | |
| 3:45pm - 5pm | Advanced Topics | Capstone | Paper | CORP: Co-operative Remote Practicum Work Experience Model for Software Engineering Education | Dannie Stanley |
| | | | Paper | | Andres Neyem, Juan Diaz-Mosquera, Jorge Munoz-Gama and Jaime Navon |
| | | | Paper | A Two-Course Sequence of Real Projects for Real Customers | Christian Murphy, Swapneel Sheth and Sydney Morton |
| | Learning / Instructional styles | | Paper | A Pedagogical Analysis of Online Coding Tutorials | Ada S. Kim and Andrew J. Ko |
| | | | Paper | Lessons Learned in the Design and Delivery of an Introductory Programming MOOC | John Michael Fitzpatrick, Akos Ledeczi, Gayathri Narasimham, Lee Lafferty, Réal Labrie, Paul Mielke, Aatish Kumar and Katherine Brady |
| | | | Paper | Employing Retention of Flow to Improve Online Tutorials | Ashok Basawapatna and Alexander Repenning |
| | | CSP | Panel | Social Justice and Equity in CS Education - Inaugural Launch of AP Computer Science Principles | Lien Diaz, Frances Trees, Dale Reed, Richard Kick and Andrew Kuemmel |
| | | CYBER | Panel | | Richard Weiss, Xenia Mountrouidou, Jens Mache and Casey O'Brien |
| | | UNDERGRAD TAS | Panel | Scaling Introductory Courses Using Undergraduate Teaching Assistants | Jeffrey Forbes, David Malan, Heather Pon-Barry, Stuart Reges and Mehran Sahami |
| | | ICER | Special Session | ICER UP CS Ed Research Workshop Summary— Essence of Illustrative Projects | Eileen Kraemer, Aubrey Lawson and Murali Sitaraman |

| Day / Time | Theme | Topic | Track | Title | Authors |
|---------------------------------|---------------------------|---------------------------|--------------------|--|--|
| Sat March 11th 8:45am - 10am | | NIFTY | Special Session | Nifty Assignments | Nick Parlante, Julie Zelenski and others |
| | K-12 / Novice Learners | K-12, CSforAll | Paper | Interested in Class, but Not in the Hallway: A Latent Class Analysis (LCA) of 2015-16 CS Student Surveys | Kenny Graves and Leigh Ann Delyser |
| | | | Paper | Teaching Computer Science in the Victorian Certificate of Education: Results of a Pilot Study | Richard Cox, Steven Bird and Bernd Meyer |
| | | | Paper | Concepts and Practices: Designing and Developing A Modern K12 CS Framework | Miranda Parker and Leigh Ann Delyser |
| | | | Paper | Gender Differences in Students' Behaviors in CS Classes throughout the CS Major | Christine Alvarado, Yingjun Cao and Mia Minnes |
| | Diversity | Gender | Paper | Understanding and Improving Diversity in CS at a Large Public R1 Research University | Monica Babes-Vroman, Andrew Tjang, Isabel Juniewicz, Thu Nguyen, Bruno Lucarelli, Nicole Fox, Georgiana Haldeman, Ashni Mehta and Risham Chokshi |
| | | | Paper | Eliminating Gender Bias in Computer Science Education Materials | Vahab Pournaghshband and Paola Medel |
| | | CS1 | Paper | Successful First Year Experience for At-Risk Students | Alice Armstrong |
| | CS1 | | Paper | Evaluating an Alternative CS1 for Students with Prior Programming Experience | Michael Kirkpatrick and Chris Mayfield |
| Sat March 11th | | | Paper | Pencil Puzzles for Introductory Computer Science: an Experience- and Gender-Neutral Context | Zack Butler, Ivona Bezakova and Kimberly Fluet |
| 10:45am - noon | Advanced Topics | Advanced Concepts | Paper | On the (Mis) Understanding of the "this" Reference | Noa Ragonis and Ronit Shmallo |
| | | | Paper | Assessing and Teaching Scope, Mutation, and Aliasing in Upper-Level Undergraduates | Kathi Fisler, Shriram Krishnamurthi and Preston Tunnell Wilson |
| | | | Paper | Multiple Levels of abstraction in Algorithmic Problem Solving | David Ginat and Yoav Blau |
| | Learning / | Instructional Practice | Paper | Exposed! CS Faculty Caught Lecturing in Public - A Survey of Instructional Practices | Scott Grissom, Sue Fitzgerald, Renée McCauley and Laurie Murphy |
| | Instructional styles | | Paper | Using Undergraduate Teaching Assistants in Small Classes | Paul Dickson, Toby Dragon and Adam Lee |
| | Styles | | Paper | A Curriculum Model Featuring Oral Communication Instruction and Practice | Jennifer Polack and Karen Anewalt |
| | | TOOLS | Panel | Technology We Can't Live Without!, revisited | Ria Galanos, Whitaker Brand, Sumukh Sridhara, Mike Zamansky and Evelyn Zayas |
| | | DIVERSITY | Panel | Teaching To Increase Diversity and Equity in STEM | Helen Hu, Douglas Blank, Albert Chan and Travis Doom |
| | | CYBER | Special Session | ACM Joint Task Force on Cybersecurity Education | Diana Burley, Matt Bishop, Scott Buck, David Gibson, Elizabeth Hawthorne and Siddharth Kaza |
| | | | Lightning Talks | | To be announced |

| Day / Time | Workshop Title | Workshop Authors |
|--------------------------|--|--|
| | An Introduction to the WEKA Data Mining System | Ingrid Russell, Zdravko Markov |
| | How to Plan, Run Effective Teacher Professional Development | Barbara Ericson, Rebecca Dovi, Ria Galanos |
| | Hyperblocks: A General Purpose Blocks-Based Language SCHEDULE | John Maloney, Michael Nagle, Jens Mönig, Mark Guzdial |
| | Using AppVis to build data-rich apps with MIT App Inventor | Fred Martin, Samantha Michalka, Harry Zhu, Jere Boudell |
| Wed March 8th | Increasing Student Interest in Data Structures Courses with Real-World Data, Visualizations Using BRIDGES | Kalpathi Subramanian, Jamie Payton |
| 7-10pm | Embedded Systems Lab Modules: A Complementary Approach to Learning System Concepts | Frank Barry |
| | Designing Empirical Education Research Studies (DEERS): Creating an Answerable Research Question | Sarah Heckman, Jeffrey Carver, Mark Sherriff |
| | Peer Instruction in Practice | Jaime Spacco, Cynthia Taylor, Joe Hummel, David Bunde, John Dooley, David Hovemeyer |
| | Teaching Distributed Computing with WorkQueue | Aaron Dingler, Peter Bui |
| | A Web-Based IDE for Teaching with Any Language | David Malan, Nikolai Onken |
| | Using, Customizing Open-Source Runestone Ebooks for Computer Science Classes | Brad Miller, Paul Resnick, Barbara Ericson |
| | Two Birds - Teaching Coding, Math in Primary Schools, Beyond | Victor Winter, Betty Love |
| | Testing Across the Curriculum | Zachary Kurmas |
| | How to Collect, Analyze, Act on Learning Data in Computer Science Courses | Ananda Gunawardena |
| | An lota of IoT | Bill Siever, Michael Rogers |
| Fri March 10th 7-10pm | How to Plan, Run Computing Summer Camps - Logistics | Krishnendu Roy, Kristine Nagel, Sarah Dunton |
| , 100111 | Workshop: Guiding Students to Discover CS Concepts, Develop Process Skills Using POGIL | Clifton Kussmaul, Chris Mayfield, Helen Hu |
| | Engaging Students with Algorithms | Crystal Furman, Sandy Czajka, Adrienne Decker, Dianna Xu |
| | Modules for Integrating Cryptography in Introductory CS, Computer Security Courses | Yesem Kurt Peker |
| | Hands-on Cybersecurity Exercises that are easy to access, assess | Richard Weiss, Jens Mache, Michael Locasto, Franklyn Turbak |
| | Parallel Computing with OpenMP on the Raspberry Pi | Suzanne Matthews, Joel Adams, Richard Brown, Elizabeth Shoop |
| | What's new in BlueJ 4: Git, Stride, more | Neil Brown, Amjad Altadmri |
| | UTeach CS Principles: Broadening Participation Through K–12 Computer Science Education, Teacher Professional Learning, Support | Bradley Beth, Amy Moreland |
| | Evidence Based Teaching Practices in CS | Briana Morrison, Mark Guzdial, Cynthia Lee, Leo Porter, Beth Simon |
| Sat March 11th | CS Discoveries: An introductory CS course for late middle, early high school | Josh Caldwell, Dani McAvoy, Gt Wrobel |
| 3-6pm | From Lightbulbs to Logic: Teaching Hardware in Intro to CS | Sean Hickey |
| | Designing Blended Learning Models to Support Computational Learning: Minecraft Edition | Dominic Amato, Ugochi Acholonu, Joshua R. Engel |
| | How to Integrate (Inter)Active Learning into Large Classes | Stephan Krusche,,reas Seitz, Nadine von Frankenberg, Bernd Bruegge |
| | C-STEM: Engaging Students in Computing with Robotics | Tasha Frankie, Duane Wesley, James Gappy, Harry Cheng |
| | Creating Peer Grading Videos | Shawn Lupoli, Karan Budhraja |