



...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.



### SIGCSE 2017 AT-A-GLANCE

#### Wednesday · March 8

8:00 am - 5:00 pm	Pre-symposium Events		
3:00 pm - 9:30 pm	Registration		
7:00 pm - 10:00 pm	Workshops		

#### Thursday · March 9

7:30 am - 5:30 pm	Registration		
8:30 am - 10:00 am	Plenary & Keynote		
10:00 am - 10:45 am	Break, Exhibits & Demos		
10:45 am - 12:00 pm	Technical Sessions		
12:00 pm - 1:45 pm	First Timer's Luncheon		
12:00 pm - 1:45 pm	Lunch Break (on your own)		
1:45 pm - 3:00 pm	Technical Sessions		
1:45 pm - 5:00 pm	Student Research Posters		
3:00 pm - 3:45 pm	Break, Exhitits & Demos		
3:45 pm - 5:00 pm	Technical Sessions		
5:30 pm - 6:20 pm	Birds of a Feather: Flock 1		
6:30 pm - 7:20 pm	Birds of a Feather: Flock 2		
7:30 pm - 9:30 pm	SIGCSE Reception		

#### Friday • March 10

8:00 am - 5:00 pm	Registration
8:30 am – 10:00 am	Plenary & Keynote
10:00 am – 10:45 am	Break, Exhibits & Demos
10:00am – 12:00 pm	Poster Session I
10:45 am – 12:00 pm	Technical Sessions
12:00 pm – 1:45 pm	Lunch Break (on your own)
12:00 pm – 1:45 pm	International Lunch
1:45 pm – 3:00 pm	Technical Sessions
3:00 pm – 3:45 pm	Break, Exhibits & Demos
3:00 pm – 5:00 pm	Poster Session II
3:45 pm – 5:00 pm	Technical Sessions
3:45 pm – 5:00 pm	Lightning Talks
5:10 pm – 6:00 pm	SIGCSE Business Meeting
6:10 pm – 7:00 pm	CCSC Business Meeting
7:00 pm – 10:00 pm	Workshops

#### Saturday · March 11

8:30 am - 11:45 am	Registration
8:45 am – 10:00 am	Technical Sessions
10:00 am – 10:45 am	Break, Exhibits & Demos
10:45 am – 12:00 pm	Technical Sessions
12:00 pm – 2:00 pm	Luncheon & Keynote
2:00 pm – 3:00 pm	Registration
3:00 pm – 6:00 pm	Workshops

### SIGCSE 2017 Pre-Symposium Events

#### Breakfast

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7:15-8:1	5

Breakfast with BlueJ and Greenfoot – Introducing Greenfoot 3, BlueJ 4, and Stride

### **Full-Day Events**

No s	pecific
scl	hedule
	given

Managing the Early Academic Career for Women Faculty in Undergraduate Computing Programs

Managing the Mid Academic Career for Women Faculty in Undergraduate Computing Programs

Making K-12 Computer Science Accessible

8:30-noon; POSSE Roundup – Student Participation in Humanitarian Open Source Software

1:30-5:00 Seeking Global, Industry and Training Provider Perspectives to Inform the ACM Joint Task Force

for Cybersecurity Education

POGIL in CS: Small Steps & Giant Leaps

### Half-Day Events

1:00-5:00pm Strategies for Integrating Driverless Cars into the Computing Curricula

1:30-5:00pm

Aligning to the ACM Cybersecurity-infused Computer Science Transfer Curriculum

NSF UP CS Ed Research Event for Emerging CS Education Researchers at SIGCSE

Day / Time	Theme	Topic	Track	Title	Authors
	K-12 / Novice Learners	Computational Thinking	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
			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
	CS1	Novice Learners	Paper	Measuring Student Learning in Introductory Block-Based Programming: Examining Misconceptions of Loops, Variables, and Boolean Logic	Shuchi Grover and Satabdi Basu
			Paper	Variable Evaluation: An Exploration of Novice Programmers' Understanding and Common Misconceptions	Tobias Kohn
Thu March 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	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 Correlations 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
		GENDER	Panel	We've Grown Our Female Undergraduate Enrollment in Computer Science: You Can Too	Wendy Dubow, Ignatios Vakalis, Amber Benton and Helen Hu
		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
		ACCESSIBILITY	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

Day / Time	Theme	Topic	Track	Title	Authors
	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	A Visual Programming Environment for Learning Distributed Programming	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	Evaluating Student Learning from Collaborative Group Tests 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 Nick 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 Competitio	rVitaly Ford, Ambareen Siraj, Ada Haynes and Eric Brown
	Learning / Instructional styles	Feedback	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
	Styles		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
		TOOLS	Panel	Beyond Autograding: Advances in Student Feedback Platforms	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

Day / Time	Theme	Topic	Track	Title	Authors
	K-12 / Novice Learners	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
			Paper	Evaluating the Effect of Using Physical Manipulatives to Foster Computational Thinking in Elementary School	Ashish Aggarwal, Christina Gardner-Mccune and David Touretzky
			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	FEllie 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 Programmin Environments	<sup>9</sup> Thomas Price, Yihuan Dong and Dragan Lipovac
			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
Fri March 10th			Paper	Exploring the Pair Programming Process: Characteristics of Effective Collaboration	Fernando J. Rodríguez, Kimberly Michelle Price and Kristy Elizabeth Boyer
10:45am - noon	Advanced Topics	Software Engineering	Paper	Innovative Pedagogical Approaches to a Capstone Laboratory Course in Cyber Operations	Mike O'Leary
			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 / Instructional styles	Mobile	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
			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
		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
	K-12 / Novice Learners		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 Professional Development	Paper	Professional recognition matters: accreditation for inservice computer science teachers	Sue Sentance and Andrew Csizmadia
			Paper	Building a Statewide Computer Science Teacher Pipeline	Helen Hu, Cecily Heiner, Thomas Gagne and Carl Lyman
			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
	Directory	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	Evaluation and Impact of a Required Computational Thinking Course for Architecture Students	Nick Senske
Fri March 10th			Paper	Examining the Enrollment Growth: Non-CS Majors in CS1 Courses	Linua J. Sax, Natifieen J. Lenman and Christina Zavaia
3:45pm - 5pm	Advanced Topics	Capstone	Paper	CORP: Co-operative Remote Practicum Work Experience Model for Software Engineering Education	Dannie Stanley
			Paper	Understanding Student Interactions in Capstone Courses to Improve Learning Experiences	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
			Paper	A Pedagogical Analysis of Online Coding Tutorials	Ada S. Kim and Andrew J. Ko
	Learning / Instructional styles	Online Learning	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	The Passion, Beauty, and Joy of Teaching and Learning Cybersecurity	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		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		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
			Paper	Successful First Year Experience for At-Risk Students	Alice Armstrong
	CS1	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 Concepts	Paper	On the (Mis) Understanding of the "this" Reference	Noa Ragonis and Ronit Shmallo
	Advanced Topics		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 styles	Instructional Practice	Paper		Scott Grissom, Sue Fitzgerald, Renée McCauley and Laurie Murphy
			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	rechnology 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	Theme	Title	Authors
	Demos	The micro:bit - hands-on computing for the new generation	Judith Bishop (Microsoft Research); Thomas Ball (Microsoft Research); Jonathan De Halleux (Microsoft Research)
		App Lab - A Powerful JavaScript IDE for Rapid Prototyping of Small Data-backed Web Applications	Sarah Filman (Code.org); Alice Steinglass (Code.org); Baker Franke (Code.org)
		EarSketch, a web-application to teach Computer Science through Music	Jason Freeman (Georgia Institute of Technology); Doug Edwards (Georgia Institute of Technology); Lea Ikkache (Georgia Institute of Technology)
		Interactive Problem Solving Using Mobile Devices in the Classroom	Mohammad Fuad (Winston-Salem State University)
		Elegit: Git Learning Tool for Students	Eric Walker (Carleton College); Julia Connelly (Carleton College); David Musicant (Carleton College)
To be scheduled		The Quorum Programming Language	Andreas Stefik (University of Nevada, Las Vegas); Richard Ladner (University of Washington)
		Distributed Programming with NetsBlox is a Snap!	Brian Broll (Vanderbilt University); Akos Ledeczi (Vanderbilt University)
		Submitty: An Open Source, Highly-Configurable Platform for Grading of Programming Assignments	Matthew Peveler (Rennselaer Polytechnic Institute); Jeramey Tyler (Rennselaer Polytechnic Institute); Samuel Breese (Rennselaer Polytechnic Institute); Barbara Cutler (Rennselaer Polytechnic Institute); Ana Milanova (Rennselaer Polytechnic Institute)
		BlockPy Interactive Demo: Dual Text/Block Python Programming Environment for Guided Practice and Data Science	Austin Bart (Virginia Tech); Dennis Kafura (Virginia Tech)
		Writing Autograders for Snap! And Integrating them Into Your Course	Michael Ball (UC Berkeley)

Day / Time	Theme	Title	Authors
		Accessibility as a First-Class Concern in Teaching GUIs and Software Engineering	Joel Ross (U Washington iSchool); Andrew Ko (U Washington iSchool); David Stearns (U Washington iSchool)
		Establishing conventions for citing educational materials	Douglas Fisher (Vanderbilt University)
		Teach Global Impact: A Resource for CSP (or Any CS Class!)	Julia Bernd (International Computer Science Institute)
		Class-Sourcing Exams: Student-Generated Exam Questions	Kendra Walther (University of Southern California)
	Lightning Talks	Seeking evidence for basing the CS theory course on non-decision problems	John Maccormick (Dickinson College)
Sat March 11th		Developing Big Data Curriculum with Open Source Infrastructure	Anurag Nagar (University of Texas at Dallas)
10:45am - noon		Teach Access: Preparing Computing Students for Industry	Megan Lawrence (Microsoft); Mary Bellard (Microsoft)
		Using the 5 Practices to Improve Facilitation of POGIL Activities	Dee Weikle (James Madison University)
		Lessons learned from an EPIC course - Mobile Application Development for Mobile Health	Chen-Hsiang Yu (Wentworth Institute of Technology)
		Bringing Real-Time Collaboration to Visual Programming	Brian Broll (Vanderbilt University); Akos Ledeczi (Vanderbilt University)
		Curriculum design for 'Explorations in Computing' (a new General Education course at USC)	Saty Raghavachary (USC)
		Moving From Business Education to Computer Science Concepts in the Middle Grades	Patty Hicks (Indian Prairie School District)

Day / Time	Theme	Title	Authors
		CSTA K-12 CS Standards for All	Deborah Seehorn (CSTA); Lissa Clayborn (CSTA)
		A Town Meeting: SIGCSE Committee on Expanding the Women-in-Computing Community	Gloria Townsend (DePauw University)
		Researching the K–12 Computer Science Framework	Pat Yongpradit (Code.org)
		Mapping Alice Curriculum to Standards	Donald Slater (Carnegie Mellon University); Eric Brown (Carnegie Mellon University); Wanda Dann (Carnegie Mellon University)
		Teaching and Learning Under Pressure: Intensive (Accelerated, Block) Computer Science Courses	Janet Burge (Colorado College); Bo Brinkman (Miami University)
		An IoT BOF	Michael Rogers (Northwest Missouri State University); Bill Siever (Washington University in St. Louis)
		SIGCSE Reads: Time for Book Discussion	Rebecca Bates (Minnesota State University, Mankato); Valerie Summet (Rollins University); Nanette Veilleux (Simmons College)
		Strategies for Including Soft Skills and Interdisciplinary Content in CS Education	Amanda Holland-Minkley (Washington & Samp; Jefferson College); Thomas Lombardi (University of the Virgin Islands); Madeline Smith (Colgate University)
To be	Birds of a Feather	Advancing Data Science for Students of All Majors	Lillian Cassel (Villanova University); Don Goelman (Villanova University); Darina Dicheva (Winston Salem State University); Heikki Topi (Bentley University); Michael Posner (Villanova University)
scheduled		Sharing and Using Programming Log Data	Thomas Price (North Carolina State University); Neil Brown (University of Kent); Chris Piech (Stanford University); Kelly Rivers (Carnegie Mellon University)
		Access to Computing Education for Students with Disabilities	Richard Ladner (University of Washington); Andreas Stefik (University of Nevada, Las Vegas); Daniela Marghitu (Auburn University)
		Improving effectiveness of CS Teacher Professional Development	Karen Parker (Google); Sloan Davis (Google); Chris Stephenson (Google); Jason Ravitz (Google)
		GitHub, Tutors, Relatives, and Friends: The Wide Web of Plagiarism	Amardeep Kahlon (Austin Community College); Bonnie MacKellar (St. John's University); Anastasia Kurdia (Tulane University)
		Strengthening Informal CS Education Program Delivery through Evaluation Capacity Building	Juliet Tiffany-Morales (Google); Kathy Haynie (Haynie Research and Evaluation); Karen Peterson (National Girls Collaborative Project); Jason Ravitz (Google)
		CS4What? A Game-based Discussion about the Purposes of Universal CS Education	Rafi Santo (Indiana University); David Phelps (University of Washington)
		Computer Science Curricular Guidelines for Associate-Degree Transfer Programs	Elizabeth Hawthorne (Union County College); Cara Tang (Portland Community College); Cindy Tucker (Bluegrass Community and Technical College); Christian Servin (El Paso Community College)
		High School CS Teacher Certification: Standards, Assessments, and Professional Development	Wesley Monroe (The University of Texas); Carol Fletcher (UT Austin Center for STEM Ed)
		The ACM Code of Ethics and Professional Conduct: Teaching Strategies and the Coming Update	Bo Brinkman (Miami University); Karla Carter (Bellevue University)

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		Sustainable Methods for Impactful Service Learning in Computer Science	Nate Derbinsky (Wentworth Institute of Technology); Durga Suresh (Wentworth Institute of Technology)
		Can we really do it? - Conducting Significant Computer Science Research in Primarily Undergraduate Institutions (PUIs)	Farzana Rahman (James Madison University); Suzanne Matthews (United States Military Academy); Andrea Danyluk (Williams College); Kelly Shaw (University of Richmond)
		Using Tangible Manipulatives for Hands-on Activities in Undergraduate Computer Science Classes	Stephanie Ludi (University of North Texas); Stan Kurkovsky (Central Connecticut State University)
		Diversity and Inclusion in CS Content	Justin Li (Occidental College)
		Perspectives on Teaching Humanitarian Free and Open Source Software	Becka Morgan (Western Oregon University); Heidi Ellis (Western New England University); Gregory Hislop (Drexel University); Grant Braught (Dickinson College); Lori Postner (Nassau Community College)
		Competency-Based Education in Lower- Division Computer Science Taught at Community Colleges	Amardeep Kahlon (Austin Community College); Mary Kohls (Austin Community College); Linda Smarzik (Ismarzik@austincc.edu)
		Collaborative research into Game Jams, Hackathons and Event-Based Teaching in Higher Education	Ian Pollock (California State University East Bay)
To be	Birds of a Feather	Building and Supporting a Community of CS Educators Teaching Cyber in 2017	Richard Weiss (The Evergreen State College); Ambareen Siraj (Tennessee Tech University); Jens Mache (Lewis & Clark College); Elizabeth Hawthorne (Union County College); Blair Taylor (Towson University); Siddharth Kaza (Towson University); Michael Locasto (SRI International)
scheduled		Forming Strong and Effective Student Teams	Anya Tafliovich (University of Toronto Scarborough); Jennifer Campbell (University of Toronto); Francisco Estrada (University of Toronto Scarborough); Daniel Zingaro (University of Toronto at Mississauga)
		Alternative Publishing and Dissemination of CS Education Research	Nickolas Falkner (The University of Adelaide); Elizabeth Patitsas (University of Toronto); Colleen Lewis (Harvey Mudd College)
		Surviving "Open-ended Projects" in Project- Based Learning: A Teacher's Perspective	Tina Ostrander (Green River College); Karen Jin (University of New Hampshire); Ruby Elkharboutly (Quinnipiac University)
		Communicating what liberal arts colleges contribute to computer science	Janet Davis (Whitman College); Angela Berardinelli (Mercyhurst University); Amanda Holland-Minkley (Washington & Jefferson College); Ellen Walker (Hiram College)
		Process Oriented Guided Inquiry Learning (POGIL) in the CS Classroom	Saturnino Garcia (University of San Diego)
		Handling Very Large Lecture Courses: Keeping the Wheels on the Bus III	Josh Hug (UC Berkeley); Cynthia Lee (Stanford)
		The Power of Analogies in Introductory CS Education	Yingjun Cao (University of California - San Diego); Scott Anderson (Wellesley College)
		Practical Systems Programming in Computer Science Education	Peter Froehlich (Johns Hopkins University); Borja Sotomayor (University of Chicago)
		Evaluating the Long-Term Impact of Pre-college Computing Activities	Adrienne Decker (Rochester Institute of Technology); Monica McGill (Bradley University); Alan Peterfreund (Sage Fox Group)
		Teaching Track Faculty in CS	Mark Sherriff (University of Virginia); Chris Gregg (Stanford University); Shawn Lupoli (University of Maryland - Baltimore County)

Day / Time	Theme	Title	Authors
		Building Tools, Gathering Data: Precursors for Assessing Students' Programming Process	Carl Alphonce (University at Buffalo); Jacob Condello (University at Buffalo); Bina Ramamurthy (University at Buffalo); Simran Singh (University at Buffalo)
		Studying Implementation of Secondary Introductory Computer Science: Pilot Results	Marie Bienkowski (SRI International); Eric Snow (SRI International)
		Implementing "In-Lab" Autograding for Snap!	Michael Ball (UC Berkeley)
		CS1: Computation & Cognition – An evidence-based course to broaden participation	Clifton Kussmaul (Muhlenberg College)
		Agile development in project-based curriculum at scale for middle and high school girls.	Sarah Judd (Girls Who Code); Megan Sullivan (Girls Who Code); Jeff Stern (Girls Who Code)
		A Final Project Report on CS4Alabama: A Statewide Professional Development Initiative for CS Principles	Kathleen Haynie (Haynie Research and Evaluation); Jeff Gray (University of Alabama); Sheryl Packman (Gator Analytics); Carol Crawford (A+ College Ready); Mary Boehm (A+ College Ready); Jonathan Corley (University of West Georgia)
		Investigating the Impact of Unsolicited Next- Step and Subgoal Hints on Dropout in a Logic Proof Tutor	Christa Cody (North Carolina State University); Behrooz Mostafavi (North Carolina State University)
		CodeBox64: A Tactile Input Modality for Block Programming	Max Paulk (Kennesaw State University); Amber Wagner (Kennesaw State University)
To be	Posters	Do computer science exposure activities and courses at the high school level influence the pursuit of computing majors in higher education among underrepresented high school students?	Allison Scott (Kapor Center for Social Impact); Alexis Martin (Level Playing Field Institute); Frieda McAlear (Level Playing Field Institute); Sonia Koshy (Kapor Center for Social Impact)
scheduled		Emerging learning progressions in K-5 integrated mathematics and computer science lesson plans	Maya Israel (University of Illinois at Urbana Champaign); Todd Lash (University of Illinois at Urbana Champaign)
		Enhancing Cybersecurity Education Using POGIL	Xiaohong Yuan (North Carolina A & T State University); Li Yang (The University of Tennessee at Chattanooga); Wu He (Old Dominion University); Jennifer Ellis (The University of Tennessee at Chattanooga); Jinsheng Xu (North Carolina A & T State University); Cynthia Waters (North Carolina A & T State University)
		Adaptive Learning Framework in ThoTh Lab, a Virtual E-Learning Platform for CS Hands-on Projects	Yuli Deng (Arizona State University); Dijiang Huang (Arizona State University); Chun- Jen Chung (Athena Network Solutions)
		Curricular Guidance for Associate-Degree Transfer Programs in Computer Science with Contemporary Cybersecurity Concepts	Cara Tang (Portland Community College); Cindy Tucker (Bluegrass Community and Technical College); Elizabeth K. Hawthorne (Union County College); Christian Servin (El Paso Community College)
		Cyber Crime Investigators: Pathways from High School to Cybersecurity Careers for First Generation College-Bound Students	Nicole Simon (City University of NY - John Jay College of Criminal Justice); Megan Banford (City University of NY - John Jay College of Criminal Justice)
		Applications of Specifications Grading in Computer Science Courses	Christian Roberson (Florida Southern College)
		What Should Cybersecurity Students Learn in School? Results from Interviews with Cyber Professionals	Keith Jones (Texas Tech University); Akbar Siami-Namin (Texas Tech University); Miriam Armstrong (Texas Tech University)

		Early Intervention to Enhance Female Interest in Computing Sciences	Jean French (Coastal Carolina University); Hailey Crouse (Coastal Carolina University)
		Coding for All: Computer Science Outreach for All Ages and Budgets	Jennifer Sabourin (SAS Institute); Lucy Kosturko (SAS Institute); Scott Mcquiggan (SAS Institute)
		Building Bridges: How the Southeast is Increasing the Representation of Students with Disabilities in STEM	Amber Wagner (Kennesaw State University); Daniela Marghitu (Auburn University)
		An Interactive Web Application Visualizing Memory Space For Novice C Programmers	Ryosuke Ishizue (Department of Computer Science and Engineering, Waseda University); Kazunori Sakamoto (National Institute of Informatics); Hironori Washizaki (Waseda University); Yoshiaki Fukazawa (Waseda University)
		Learning and Identity in YWIC- An Analysis of Program Implementation and Design as Promoting Agency in Computing	Sarah Hug (Colorado Evaluation & Research Consulting); Enrico Pontelli (New Mexico State University); Suzanne Eyerman (Colorado Evaluation & Research Consulting)
		Using Static Analysis for Automated Assignment Grading in Introductory Programming Classes	Samuel Breese (Rensselaer Polytechnic Institute); Ana Milanova (Rensselaer Polytechnic Institute); Barbara Cutler (Rensselaer Polytechnic Institute)
		Conducting A Social Constructivist Epistemology for CS1 and CS2 Students - A Research Case Study	Brennen Frisque (University of Wisconsin-Green Bay); Ankur Chattopadhyay (University of Wisconsin - Green Bay)
To be		Can Undergraduate CS Research Be Student- Driven? - An Experimental Case Study	Chelsea Patek (University of Wisconsin-Green Bay); Ankur Chattopadhyay (University of Wisconsin - Green Bay)
scheduled	Posters	CS OPEN: Building Evaluative Capacity for Out of School Organizations that Engage Girls in Computer Science	Juliet Tiffany-Morales (Google); Kathy Haynie (Haynie Research and Evaluation); Jason Ravitz (Google); Karen Peterson (National Girls Collaborative Project)
		Broadening Participation Research Project: Exploring Computing Careers through a Virtual Career Exploration Fair Using Embodied Conversational Agents	Kinnis Gosha (Morehouse College); Kamal Middlebrook (Morehouse College)
		What We Say vs. What They Do: A Comparison of Middle-School Coding Camps in the CS Education Literature and Mainstream Coding Camps	Anita Dewitt (Grinnell College); Julia Fay (Grinnell College); Madeleine Goldman (Grinnell College); Eleanor Nicolson (Grinnell College); Linda Oyolu (Grinnell College); Lukas Resch (Grinnell College); Jovan Saldaña (Grinnell College); Soulideth Sounalath (Grinnell College); Tyler Williams (Grinnell College); ; ;
		Computer Science Teaching Knowledge: A Framework and Assessment	Aleata Hubbard (WestEd); Yvonne Kao (WestEd)
		A Game-Driven Approach to Teaching Bit Manipulation	Paul Voelker (University of Wisconsin-Eau Claire); Chris Johnson (University of Wisconsin-Eau Claire)
		Collecting participation data across CS10K-funded PD providers	Rebecca Zarch (SageFox Consulting Group); Alan Peterfreund (SageFox Consulting Group)
		Using Professional Development to move toward a Guided Discovery approach in the classroom	Susan Miller (University of Colorado)
		Finding Equilibrium: How to Support the Game Balance at the Very Beginning?	Jan Vykopal (Masaryk University); Jakub Čegan (Masaryk University)

		Computational Thinking App Design Mat: Supporting the Development of Students' Computational Thinking Skills	Yerika Jimenez (University of Florida); Theodore Hays (Clemson University); Christina Gardner-Mccune (University of Florida)
		CS for SC: A Landscape Report of K-12 Computer Science in South Carolina	Quinn Burke (College of Charleston); Madeleine Schep (Columbia College); Travis Dalton (Columbia College)
		Merging MyCS: Lessons from a District-wide Middle-school CS pilot	Samantha Andow (Harvey Mudd College); Kaitlyn Eng (Harvey Mudd College); Julia McCarthy (Claremont McKenna College); Olivia Palenscar (Scripps College); Thomas Schneider (Harvey Mudd College); Adam Schulze (Harvey Mudd College); Bryan Twarek (San Francisco Unified School District); Zachary Dodds (Harvey Mudd College)
		Progsnap: Sharing Programming Snapshots for Research	David Hovemeyer (York College of Pennsylvania); Arto Hellas (University of Helsinki); Andrew Petersen (University of Toronto, Mississauga); Jaime Spacco (Knox College)
		Open Extensible System for Dynamic Problem Creation for Computer Science	Keith Irwin (Winston-Salem State University); Darina Dicheva (Winston-Salem State University); Christo Dichev (Winston-Salem State University)
		Examining PhD Student Interest in Teaching: An Analysis of 19 Years of Historical Data	Travis Mandel (University of Washington); Jens Mache (Lewis & Clark College)
	Posters	Hopper's Fables: A Mathematical Storytelling Adventure	Deja Jackson (Kennesaw State University); Erica Pantoja (Kennesaw State University); Cindi Simmons (Kennesaw State University); Kate Zelaya (Kennesaw State University); Amber Wagner (Kennesaw State University)
To be scheduled		Motivating K-12 Students Toward Computer Science, and Computer Science Students Toward Teaching	Peter Tucker (Whitworth University); Robert Bryant (Gonzaga University)
Scrieduled		On the Integration of Big Data and Cloud Computing Topics.	Debzani Deb (Winston-Salem State University)
		A Flexible Late Day Policy Reduces Stress and Improves Learning	Jeramey Tyler (Rensselaer Polytechnic Institute); Matthew Peveler (Rennselaer Polytechnic Institute); Barb Cutler (Rensselaer Polytechnic Institute)
		Analysis of the Association Between Previous Computer Science Experience, Gender, Ethnicity and Privilege Gaps in Motivation for Computer Science as Observed in a Large Scale Survey of Middle School Students	Jeffrey Bush (University of Colorado); Susan Miller (University of Colorado)
		Should your college computer science program partner with a coding boot camp?	Louise Ann Lyon (ETR); Quinn Burke (College of Charleston); Jill Denner (ETR); James Bowring (College of Charleston)
		Implementing CS Principles as a Breadth-First Survey Course	Chris Mayfield (James Madison University)
		Cracking the Code: Bringing Introductory Computer Science to a Charleston Middle School	Clare Rumsey (College of Charleston); Quinn Burke (College of Charleston); Christopher Thurman (Charleston, SC School District)
		Measuring Learning of Code Patterns in Informal Learning Environments	Sayamindu Dasgupta (Massachusetts Institute of Technology); Benjamin Mako Hill (University of Washington)
		Broadening Secure Mobile Software Development (SMSD) Through Curriculum	Fan Wu (Tuskegee University); Kai Qian (Kennesaw State University); Hossain Shahriar (Kennesaw State University); Cassandra Thomas (Tuskegee University)

Day / Time	Theme	Title	Authors
		Sniffing Through Millions of Block-Based Programs for Bad Smells	Peeratham Techapalokul (Virginia Tech)
		Optimizing Kinect Depth Sensing Using Dynamic Polarization	Jakub Jancek (Benedictine University); Darya Aleinikava (Benedictine University); Grace Mirsky (Benedictine University)
		Quadrilateral Mesh Boundary Classification and Editing	Ziyan Yang (Bryn Mawr College)
		Applying Machine Learning to Predict Davidson College's Admissions Yield	Joseph Jamison (Davidson College)
		Quadrilateral Mesh Generation with a Provably Good Aspect Ratio Bound	Christopher Gillespie (Rutgers University, Camden, NJ (student))
		The Application of 2D Structure Tensor in Visual Arts Design	Alec Battles (Texas Woman's University); Jian Zhang (Texas Woman's University)
		One Size Doesn't Fit All	Zane Johnston (Kennesaw State University)
		Identifying and Exploiting Vulnerabilities in Civilian Unmanned Aerial Vehicle Systems and Evaluating and Countering Potential Threats Against the United States Airspace	Philip Costello (Randolph-Macon College)
		Improving SAT-Solving with Machine Learning	Haoze Wu (Davidson College); Raghuram Ramanujan (Davidson College)
		Using Scratch and Female Role Models while Storytelling Improves Fifth- Grade Students' Attitudes toward Computing	Raza Zaidi (DePauw University); Isabel Freihofer (DePauw University); Gloria Townsend (DePauw University)
		Mixed-initiative Personal Assistant Agents	Joshua Buck (University of Dayton); Saverio Perugini (University of Dayton)
		ORCA: A Proof Assistant for Undergraduate Students	Jianting Chen (Grinnell College); Medha Gopalaswamy (Grinnell College); Prabir Pradhan (Grinnell College); Sooji Son (Grinnell College); Peter-Michael Osera (Grinnell College)
To be	Student Research Competition	Scaling Up Automated Verification: A Case Study and Formal-IDE for the Construction of High Integrity Software	Daniel Welch (Clemson University)
scheduled		Creative Computing and Society: When undergraduates design a curriculum for an introductory computing course	Sierra Magnotta (Bucknell University); Anushikha Sharma (Bucknell University); Jingya Wu (Bucknell University); Darakhshan Mir (Bucknell University)
		A Pathway to Strengthening Support for BJC Teachers	Meghana Subramaniam (North Carolina State University); Veronica Catete (North Carolina State University)
		Digitalizing Paper-Based Exams: An Assessment of Programming Grading Assistant	Hannah Murphy (Arizona State University); Hannah Murphy (Arizona State University)
		Raising Flags: Detecting Covert Storage Channels using Relative Entropy	Josephine Chow (University of Maryland, College Park); Xiangyang Li (Johns Hopkins University); Xenia Mountrouidou (College of Charleston)
		Time Lord: Covert Timing Channel Implementation and Realistic Experimentation	Eduardo Castillo (Wofford College); Xiangyang Li (Johns Hopkins University); Xenia Mountrouidou (College of Charleston)
		COPPER: Teacher Configurable Coding Challenges for Block Languages	Nath Tumlin (University of Alabama)
		Tapping-based Authentication for Mobile Device Security	Lukasz Brodowski (Central Connecticut State University); Cameron Dziurgot (Central Connecticut State University); Donald Moretz (Central Connecticut State University)
		Managing the Internet of Things	Ben Romano (The University of Alabama)
		Misconceptions of the Assignment Statement	Vivian Venter (University of Pretoria/Epi-Use Labs)
		Recursive convergence	Amy MacDonough (Haverford College)
		Neo-Piagetian Classification of Reasoning Ability and Mental Simulation to Lawfully Simulate Computational Rules in Microsoft's Kodu Game Lab	Ashish Aggarwal (UNIVERSITY OF FLORIDA)
		The Urban Archivist Application	James Belford (St Martins University)

Day / Time	Workshop Title	Workshop Authors
	An Introduction to the WEKA Data Mining System	Ingrid Russell, Zdravko Markov
Wed March 8th	What's new in BlueJ 4: Git, Stride, more	Neil Brown, Amjad Altadmri
	GP: A General Purpose Blocks-Based Language	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
	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
	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
	How to Plan, Run Effective Teacher Professional Development	Barbara Ericson, Rebecca Dovi, Ria Galanos
	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