SIGCSE 2017 Best Paper and Exemplary Paper Awards

This year the program chairs recognize a new category of the top 25% of accepted papers as "Exemplary papers", highlighted for their accomplishment of high quality, novelty and broad appeal to reviewers. There were a total of 348 full papers submitted to SIGCSE 2017. Of these, 105 were accepted. Of these 105, 26 were selected as exemplary papers. All exemplary papers had an average reviewer score of 4.8 or above (on a 6-point scale), with no scores below 3. One best paper was selected in each category of New Program (i.e., Curriculum / Program / Degree Initiative), Experience Report, and CS Education Research, based on receiving 2 of the highest reviewer ratings.

Paper Category	Submitted	Accepted	Exemplary
Experience Report	99	21 (21.2%)	4 (4.0%)
New Program	20	7 (35.0%)	2 (10.0%)
CS Education Research	229	77 (33.6%)	20 (8.7%)
TOTAL	**348**	**105 (30.2%)**	**26 (7.5%)**

We present the SIGCSE 2017 Best Papers, then the SIGCSE 2017 Exemplary Papers, ordered by category, with the best paper first, and then ordered by the last name of the first author.

Best Experience Report Paper
Making Noise: Using Sound-Art to Explore Technological Fluency
Erik Brunvand, Nina McCurdy *(University of Utah)*

Best New Program Paper
Infrastructure for Continuous Assessment of Retained Relevant Knowledge
Kathleen Timmerman, Travis Doom *(Wright State University)*

Best CS Education Research Paper
Computing with CORGIS: Diverse, Real-world Datasets for Introductory Computing
Austin Cory Bart, Ryan Whitcomb, Dennis Kafura, Clifford A. Shaffer, Eli Tilevich *(Virginia Tech)*

Exemplary Experience Report Papers

Making Noise: Using Sound-Art to Explore Technological Fluency
Erik Brunvand, Nina McCurdy *(University of Utah)*

A Two-Course Sequence of Real Projects for Real Customers
Christian Murphy, Swapneel Sheth, Sydney Morton *(University of Pennsylvania)*

Preparing and Supporting Industry Professionals as Volunteer High School Computer Science Co-Instructors
Anthony Papini *(TEALS);* Leigh Ann DeLyser *(CSNYC);* Nathaniel Granor, Kevin Wang *(TEALS)*

Integrating Computer Science into Music Education
John Peterson, Greg Haynes *(Western State Colorado University)*

Exemplary New Program Papers

Infrastructure for Continuous Assessment of Retained Relevant Knowledge
Kathleen Timmerman, Travis Doom *(Wright State University)*

Preparing STEM Teachers to offer New Mexico Computer Science for All
Irene A. Lee *(Massachusetts Institute of Technology);* Maureen Psaila Dombrowski *(Los Alamos National Laboratory);* Ed Angel *(University of New Mexico)*

Exemplary CS Education Research Papers

Computing with CORGIS: Diverse, Real-world Datasets for Introductory Computing
Austin Cory Bart, Ryan Whitcomb, Dennis Kafura, Clifford A. Shaffer, Eli Tilevich *(Virginia Tech)*

Incorporating Human Error Education into Software Engineering Courses via Error-based Inspections
Vaibhav Anu, Gursimran Walia *(North Dakota State University);* Gary Bradshaw *(Mississippi State University)*

Employing Retention of Flow to Improve Online Tutorials
Ashok Basawapatna *(SUNY Old Westbury);* Alexander Repenning *(University of Applied Sciences and Arts Northwestern Switzerland)*

Examining the Relationship Between Introductory Computing Course Experiences, Self-Efficacy, and Belonging Among First-Generation College Women
Jennifer M. Blaney *(University of California, Los Angeles);* Jane G. Stout *(Computing Research Association)*

Pencil Puzzles for Introductory Computer Science: An Experience- and Gender-Neutral Context
Zack Butler, Ivona Bezáková *(Rochester Institute of Technology);* Kimberly Fluet *(St. John Fisher College)*

Evaluating Student Learning from Collaborative Group Tests in Introductory Computing
Yingjun Cao, Leo Porter *(University of California, San Diego)*

Evaluating Neural Networks as a Method for Identifying Students in Need of Assistance
Karo Castro-Wunsch *(University of Toronto Mississauga);* Alireza Ahadi *(University of Technology, Sydney);* Andrew Petersen *(University of Toronto Mississauga)*

Evaluating the Effectiveness of Algorithm Analysis Visualizations
Mohammed F. Farghally *(Virginia Tech);* Kyu Han Koh *(California State University Stanislaus);* Hossameldin Shahin, Clifford A. Shaffer *(Virginia Tech)*

The Code Mangler: Evaluating Coding Ability Without Writing any Code
Nick Cheng, Brian Harrington *(University of Toronto Scarborough)*

Interactions of Individual and Pair Programmers with an Intelligent Tutoring System for Computer Science
Rachel Harsley *(University of Illinois at Chicago);* Davide Fossati *(Emory University);* Barbara Di Eugenio *(University of Illinois at Chicago);* Nick Green *(University of Illinois at Chicago)*

Building a Statewide Computer Science Teacher Pipeline
Helen H. Hu *(Westminster College);* Cecily Heiner *(Southern Utah University);* Thomas Gagne *(University of Puget Sound);* Carl Lyman *(Utah State Office of Education)*

Student Perspectives of Team-Based Learning in a CS Course: Summary of Qualitative Findings
Michael S. Kirkpatrick *(James Madison University)*

Generating Hints and Feedback for Hilbert-style Axiomatic Proofs
Josje Lodder*,* Bastiaan Heeren *(Open University of the Netherlands);* Johan Jeuring *(Open University of the Netherlands & Utrecht University)*

Understanding Student Interactions in Capstone Courses to Improve Learning Experiences
Andres Neyem*,* Juan Diaz-Mosquera*,* Jorge Munoz-Gama, Jaime Navon *(Pontificia Universidad Catolica de Chile)*

Exploring the Pair Programming Process: Characteristics of Effective Collaboration
Fernando J. Rodríguez*,* Kimberly Michelle Price*,* Kristy Elizabeth Boyer *(University of Florida)*

Improving Students' Learning and Achievement in CS Classrooms through Computational Creativity Exercises that Integrate Computational and Creative Thinking
Duane F. Shell*,* Leen-Kiat Soh*,* Abraham E. Flanigan*,* Markeya S. Peteranetz*,* Elizabeth Ingraham *(University of Nebraska-Lincoln)*

Deconstructing the Discussion Forum: Student Questions and Computer Science Learning
Mickey Vellukunnel *(University of Florida);* Philip Buffum *(North Carolina State University);* Kristy Elizabeth Boyer *(University of Florida);* Jeffrey Forbes *(Duke University);* Sarah Heckman *(North Carolina State University);* Ketan Mayer-Patel *(University of North Carolina)*

iSnap: Towards Intelligent Tutoring in Novice Programming Environments
Thomas W. Price*,* Yihuan Dong*,* Dragan Lipovac *(North Carolina State University)*

Evaluation and Impact of a Required Computational Thinking Course for Architecture Students
Nick Senske *(Iowa State University)*

Exam Wrappers: Not a Silver Bullet
Ben Stephenson *(University of Calgary);* Michelle Craig *(University of Toronto);* Daniel Zingaro *(University of Toronto Mississauga);* Diane Horton*,* Danny Heap*,* Elaine Huynh *(University of Toronto)*