SIGCSE FY15 Annual Report
July 2014 - June 2015
Submitted by: Susan H. Rodger, Chair

1. **Awards that were given out:**

   The SIGCSE Award for Outstanding Contribution to Computer Science Education was presented to Mark Allen Weiss from Florida International University for authoring textbooks on introductory programming and data structures that have had a profound impact on generations of students, and for dedicated service contributions regarding the Advanced Placement Computer Science program.

   The SIGCSE Award for Lifetime Service to the Computer Science Education Community was presented to Frank Young, Emeritus Professor of Rose-Hulman Institute, for dedicated service to the computing education community. He especially had many contributions to SIGCSE including co-chairing the Symposium, leading efforts for many years with the registration system for the Symposium and most recently spent many years as the SIGCSE Information Co-Director.

2. **Significant papers on new areas that were published in proceedings**

   ICER 2014 had two best paper awards. The Chair's award is selected by the organizing committee and was presented to:

   Leo Porter, Daniel Zingaro and Raymond Lister, Predicting student success using the fine grain clicker, ICER '14, Proceedings of the tenth annual conference on international computing education research, pages 51-58, 2014.

   The ICER 2014 John Henry Award is selected by the conference delegates and was presented to:

   Josh Tenenberg and Yifat Ben-David Kolikant, Computer programs, dialogicality and intentionality, ICER '14, Proceedings of the tenth annual conference on international computing education research, pages 99-106, 2014.

   The best paper selected at ITiCSE 2015 was:

   Insa, David and Silva, Josep, Semi-Automatic Assessment of Unrestrained Java Code: A Library, a DSL, and a Workbench to Assess Exams and Exercises, ITiCSE '15 Proceedings of the 2015 ACM Conference on Innovation and Technology in Computer Science Education, pages 39-44, 2015.

   The best paper selected at SIGCSE 2015 was:

   Celine Latulipe, N. Bruce Long, and Carlos E. Seminario, Structuring Flipped Classes with Lightweight Teams and Gamification, SIGCSE '15 Proceedings of the 46th ACM Annual Technical Symposium on Computer Science Education, pages 392-397, 2015.

3. **Significant programs that provided a springboard for further technical efforts:**

SIGCSE Special Projects Fund provides grants up to $5000 per project and has calls in November and May each year. The November call funded three projects for a total of $10,000. One award was made to Steve Wolfman and William Byrd to make video blogs about computer science education. A second award was made to Yifat Kolikant, Sally Fincher and Josh Tenenberg for adapting computer science education to the internet age. A third award was made to Alessio Gaspar and Amruth Kumar to assess the potential of Parsons Puzzles with learning programming. The May call funded two projects for a total of $8277. One award was made to Samantha Foley and Joshua Hursey to create an interactive learning portal for parallel computing environments. The second award was made to Stanislav Kurkovsky for a low-cost adaptation of Lego serious play to teach software engineering.

ITiCSE 2015 had seven working groups on the topics of Global Software Engineering Courses, Educational Data Mining, CS Education in K-12 Schools, key concepts in K-9 CS education, a repository for high school computer science questions, designing an Information Technology Curriculum Framework, and a Taxonomy of Computing Education Terminology. Many of the working groups start projects that continue collaborations.

4. **Innovative programs which provide service to some part of your technical community:**

We restarted a Department Chair's workshop for future or present Department Chairs that ran on March 11, 2015, the day before the SIGCSE Symposium. The last such workshop had been held in 2011. We plan to run this workshop every other year. The SIGCSE 2015 Chair's workshop had five presenters (Sandra DeLoatch, Frank Young, George Berg, Mary Lou Maher, and Aurelia T. Willams), and 16 attendees, and was held the day before SIGCSE on March 11, 2015. On alternate years, the SIGCSE Board plans to run the New Educator's Workshop, with the next one at SIGCSE 2016.

The 2015 SIGCSE Symposium held twenty-eight three-hour workshops for professional development. In addition, the SIGCSE Symposium provided the meeting space for nine pre-symposium events for educators that included a CRA-W career mentoring workshop, LittleFe Build-Out, GENI in your classroom, Cyber Education Steering Committee meeting, Department Chair's Roundtable, Git and Github, CS Teaching Tips, Teaching to Diversity in Computer Science and an ACM SIGCAS meeting.

A Doctoral Consortium was held on August 10, 2014, the day before ICER 2014, and attended by seventeen graduate students in computer science education with travel support from SIGCSE. These students present their work and get feedback from senior researchers in the field. This event also helps to grow the community of computer science education researchers.

5. **Events or programs that broadened participation either geographically, or among under-represented members of your community:**

ITiCSE conferences have always been in or near Europe. ITiCSE 2016 will be in a different geographical location, in Peru. With locating ITiCSE 2016 in South America we hope to grow ITiCSE and increase the number of delegates from this new region.

In 2013, SIGCSE started a Travel Grant Program for faculty who have never attended the SIGCSE Symposium. Five awards were made for SIGCSE Symposium 2014, but two of the attendees could not attend due to visa issues. This year we moved the deadline earlier and six awards were made to attend SIGCSE Symposium 2015. Three of the awardees were from the United States and three were from Jamaica, Albania and the United Kingdom.

SIGCSE provides grants to non-ACM conferences that are in-cooperation with SIGCSE to bring one or more speakers from a recent SIGCSE Symposium, ITiCSE or ICER conference to repeat their presentation. This past year this program provided a grant to CCSC-MW for a keynote talk by Joel Adams.

In February 6, 2015 a new SIGCSE chapter was launched, iSIGCSE in Goa India at the ACM India Annual conference. That same week there were two iSIGCSE Workshops held in India, one in Goa and one in Pune. We hope to work with them on growing the computer science education community in India.

6. **Key issues that the membership of that SIG will have to deal with in the next 2-3 years:**

One key issue is the growth of our smallest conference of computer science education researchers, ICER. ICER has had between 60 and 80 participants in its first ten years and is approaching its 11th conference in August with ICER 2015. This time the conference will exceed expectations on many counts. ICER 2015 has over 100 registrants, the largest Doctorial Consortium with twenty graduate student awards, two pre-workshop events, twenty-five accepted research papers, and an increase in lightning talk and poster presenters (from 10 to over 20). We hope for this conference to maintain this increase and to continue to grow.

A second issue is growing computer science education in other parts of the world, in particular in Europe. Although still in the early stages, SIGCSE is working with several other organizations (ACM-Europe, Informatics Europe) and conferences (WiPSCE, ISSEP, CSERC, and possibly others) on a stronger presence of computing education conferences in Europe for 2017, possibly a federated conference of many existing conferences. This timing is being coordinated with the return of ITiCSE to Europe in 2017.

A third issue is to continue to expand SIGCSE internationally by making sure there are international members on the SIGCSE Board. The previous SIGCSE Board had only United States-based members, but the current board has two members from Australasia. With an election coming up in mid-2016, we will encourage non-United States members to run for a position on the SIGCSE Board.

A fourth issue is the cost of our membership. In 2013, we determined that our membership dues were not covering the cost of our membership. Starting in 2014 we created two membership rates, an electronic membership rate at the same membership price as

before, $25, and a paper membership rate to include ACM Inroads as a paper copy for $45. The majority of new memberships and renewals are signing up for the electronic membership rate.

A fifth issue is to continue to get new volunteers involved with SIGCSE. We have created a volunteer coordinator position and an online signup form at SIGCSE.org to make it easier for volunteers to see what types of volunteer opportunities are available and to indicate their interest in volunteer positions. This past year we have filled many new positions such as Information Co-Director (managing SIGCSE listservs) with Sam Rebelsky, SIGCSE Bulletin co-editor with Maureen Doyle, SIGCSE Social Media coordinator with Brianna Morrison, Conference Review Supporter Software with Leen-Kiat Soh and Brad Miller, and SIGCSE Volunteer Coordinator with Tiffany Barnes.