SIGCSE Bulletin, Vol. 50, No. 3

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+ ACM Senior Member

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SIGCSE News in Brief

We hope everyone's summer is off to a great start! Thank you to the many members who attended ITiCSE 2018 in Larnaca, Cyprus last week for a great conference. For those of you thinking of attending ICER 2018 in Espoo, Finland (August 13-15), please be sure to register and book your travel if you have not already.

In this issue, we begin with an article on the upcoming 50th anniversary of the SIGCSE Symposium. Next, for those planning to submit papers to SIGCSE, we have a guide on what makes for a successful paper which you'll want to check out.

Also in this issue we look at the RESPECT conference, include the SIGCSE Chair's annual report, and provide an article on SIGCSE Travel grants and how to apply. Our member interview is with Bob Aiken, an early SIGCSE member, former SIGCSE Chair, and former SIGCSE Bulletin Editor. In his interview, we discuss how SIGCSE has changed over the years and look at its direction forward.

We wish you all a relaxing and yet, productive, summer!

Help us Celebrate 50 SIGCSE Technical Symposiums

Adrienne Decker, Kurt Eiselt, Carl Alphonce
50th Celebration Planning Committee

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Following quickly on the heels of the 50th anniversary of the formation of SIGCSE (the organization), we find ourselves preparing to celebrate the 50th SIGCSE Technical Symposium, SIGCSE 2019. SIGCSE 2019 will be held February 27 – March 2, 2019 in Minneapolis, Minnesota.

The most important thing we can do now is prepare to celebrate the 50th SIGCSE Technical Symposium. Whether our role will be that of author, attendee, or SIGCSE community member, we need to think about our past as we prepare to forge ahead into our future.

In coordinating the celebration we have asked ourselves two important questions:
•	What has the past given us? and
•	What will the future hold?

We have a rich history of people who came together to create the community and the conference that we have today. SIGCSE 2018 had the largest number of submissions and largest attendance of any SIGCSE Technical Symposium to date, but there is always room to grow our SIGCSE family. We would like to see all of our familiar community members at SIGCSE 2019 in Minneapolis, but we would also like to welcome many new faces to help guide us into that future.

To that end, the SIGCSE Board has allocated funds for the celebration of the 50th symposium and specifically to support the goal of attracting 50 new conference attendees for SIGCSE 2019. These new attendees will be supported through our traditional travel grant program (see the article about applications being open in this issue of the bulletin) as well as through other opportunities to recognize these first-time attendees and entice them to become regular attendees with subsequent travel grants to SIGCSE 2020.

Our work as a committee has just begun and we are exploring innovative ways to blend the past with the present and welcome all community input to this process. We want to honor our past, our history, our legacy and we want to push SIGCSE into the next 50 years with a strong start. We will be putting together sessions for the upcoming symposium and asking members of the community to contribute to the content and structure of those sessions. If you were already in the process of planning submissions, we would like to hear from you so as not to duplicate efforts.

If you are interested in contributing, or have ideas to share, please reach out using the email: 50th-celebration@sigcse2019.org.

What is a SIGCSE Symposium Paper?

By Sarah Heckman and Jian Zhang, SIGCSE 2019 Program Co-Chairs, and Manuel A. Pérez-Quiñones and Elizabeth K. Hawthorne, SIGCSE 2019 General Co-Chairs

The SIGCSE 2019 Technical Symposium paper deadline is fast approaching! (Deadline Reminders: Abstracts - August 24, 2018; Full Papers - August 31, 2018). The Program Chairs, Associate Program Chairs (APCs), and Reviewers are eagerly awaiting your submissions through EasyChair, our submission management system, which will open for submissions in early July. We're especially excited about the new page length of up to six pages of content with one page for references.

There are three tracks for SIGCSE papers: CS Education Research; Experience Reports & Tools; and Curriculum Initiatives. Please submit to the most appropriate track; reviewers will be asked to review for a specific track. Papers will not be moved between tracks. To help authors, we're providing some additional guidelines that support the extended Call for Papers.

CS Education Research submissions report on a research study that addresses one or more research questions. Studies are typically pre-planned and may be a controlled experiment, quasi-experimental, or a rigorous case study. Studies may involve qualitative and/or quantitative analysis that seeks to answer one or more research questions. CS Education Research submissions should be situated in the broader literature preferably with a theoretical basis. The submission should provide a clear process/methodology for answering the research questions that would support replication (possibly with supplemental resources). The contribution of the submission should be clear and either demonstrate novelty or discuss the implications of replicated work in comparison to prior studies. Finally, threats to validity of the study must be discussed.

Experience Reports & Tools submissions cover several types of submissions. An experience report is a case study or analysis of an experience where a research study was not originally planned, but something interesting happened that contributes to the community. A tools submission typically discusses a tool that supports CS education without the expectation of tool evaluation (tool evaluation papers may be more appropriate for the CS Education Research track). Experience Reports and Tools papers should have a clear contribution of interest to the SIGCSE community. The submission should be situated in the broader literature, describe the experience or tool, and provide details about how others may adopt the educational innovation or tool.

Curriculum Initiatives submissions describe the position of an individual or group in relation to curricula, programs, or degrees or a larger topic of interest to the CS Education community (e.g., a position paper). These goal of these papers are to defend a design or position. The overarching design or position should be clearly described and situated in the broader literature to provide context for the discussion. The submission should contain several premises and evidence that support the author's conclusions.

We look forward to receiving your paper submissions.

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Member Spotlight

In this feature of the Bulletin, we highlight members of the SIGCSE community. In this issue, Bulletin co-editor Leo Porter interviewed Bob Aiken. In 1995 Bob received the SIGCSE Outstanding Contribution Computer Science Education Award and in 1999 received the ACM SIGCSE Lifetime Service to Computer Science Education for his advocacy for computer science education both in the US and abroad. Bob was elected an ACM Fellow in 2002. His background is in artificial intelligence, educational uses of computers, and online collaboration tools. He is working on an article about the history of SIGCSE which will appear in the December issue of Inroads for the 50th year celebration of SIGCSE.

Bob Aiken. Photo by Bob Aiken.

LP: When and how did you first get involved with the CS education community?

BA: Probably my first real dip in the water came as a graduate assistant for a few courses when I was at Northwestern in the mid 60s, then when I started at the University of Tennessee as an Assistant Professor in 1968. In August 1968, I attended the 23rd National ACM Conference held in Las Vegas where I met a number of leading CS educators, including the founder of SIGCSE, Elliott Organick. Elliott gathered a group of us to discuss the formation of SIGCSE and to sign a petition as the first step to get SIGCSE started. We organized as a Special Interest Committee (SIC) funded by ACM. To become a SIG, we had to show we were viable by publishing a bulletin and by getting enough colleagues to commit to becoming dues paying members. I'm pleased to say we were successful and SIGCSE was officially established in 1969.

LP: How did you form the initial group that was interested in starting SIGCSE?

BA: By word of mouth and through notices in journals such as the Communications of the ACM. In order to establish the SIG we also needed to get the Bulletin to as many colleagues as possible who were interested in CS education. Initially, it was just a couple of hundred people – mostly using mailing lists several of our group had compiled. A number of colleagues were also involved in ACM, Spring and Fall Joint Computer Conferences (SJCC & FJCC) and we used these connections as well. We recruited members from other countries through attending and participating in the International Federation for Information Processing (IFIP) First World Conference on Computing Education (WCCE) held in Amsterdam in the summer of 1970.

LP: How do you feel the community has changed over the years?

BA: Early on it was a small group of academics who were passionate about education, and a few advocates from publishers and corporations. At first, the activities were mainly the Bulletin and our Technical Symposium. The core group was much smaller and more informal than now. Over the years, we have added many collaborations and developed a number of related activities, including ICER, ITiCSE, K12 outreach, and the

list continues. It's a wonderful expansion of the community to incorporate more people, and many new perspectives. Moreover, the service load and energy is shared by a diverse cadre of colleagues.

One of our original goals was to reach 1,000 attendees at our annual Technical Symposium. It took about 10 – 15 years to reach it. We now average 1,600-1,700; an achievement of which we can all be proud!

LP: Do you recall the motivations to add ITiCSE and ICER?

BA: These initiatives were member driven. SIGCSE leadership saw a need and provided the perspective and energy to make them happen. We worked to create ICER to engage the research community more fully and founded ITiCSE to allow colleagues outside of North America to attend a CS education conference more easily. I was not directly involved in their establishment but certainly appreciate what was accomplished.

LP: What were your major activities with SIGCSE?

BA: I was mainly involved from the inception into the mid-80s. I served as the first Secretary in 1968 and then starting with the third issue, Editor of the Bulletin until 1973. I was a member of the Board of Directors from 1975-1977 and again from 1981-1985. I was the Chair of SIGCSE for two terms, from 1977-1981. I also helped establish the Outstanding Contribution and the Lifetime Service Awards.

Since then I have continued to participate in panels, written a number of papers and was a reviewer for many years. I promoted the collaboration of SIGCSE with different ACM Education Board activities (where I served as a member for many years and Chair from 1985-1989).

LP: How do you feel the community has changed over the years?

Electronic communication has changed how we interact a great deal. Previously Bulletins were typed on mats and we used white-out to make corrections. The mats were mailed to ACM headquarters where the Bulletin was printed and mailed. Also, the Bulletins were longer back then: 25-50 pages, but they were also serving a different role since they were our primary means for communication with our members as well as publishing papers, notices, etc. The time between preparing the Bulletin and actually getting it to our members could take up to 5 – 6 weeks. Now we engage members in real time in a number of different ways, including the Bulletin, Inroads, and emails lists.

LP: Given where computer science education is now, what do you think the community is doing well?

BA: The community is doing a good job in communicating with members, and the evolution of growth has been well directed. We have been fortunate in leadership and the number of people who have contributed in key roles (in addition to our elected officers) such as finding conference sites, preparing the Bulletin, editing and developing/promoting Inroads, Chairing our Symposia and various conferences, plus serving as reviewers, PC members and chairs. This commitment and engagement is crucial to the success of SIGCSE.

Anticipating the needs of the community has also been a key goal of the SIGCSE leadership. Some initiatives have been SIGCSE driven, others were collaborations with other organizations such as the ACM Education Board, Educational Testing Service, and the IEEE Computer Society (Curriculum Guidelines and accreditation). Included in SIGCSE's list of sponsored/funded activities

are: ITiCSE, ICER, several awards, the web site, mailing lists, travel grants, regional conferences, special projects, "First Timer" luncheons, and local chapters.

LP: What is the origin of the travel grants?

BA: Several SIGCSE leaders including Henry Walker and Lilian (Boots) Cassel promoted and championed this initiative. There was an awareness that SIGCSE wanted to assist colleagues who did not have the resources to attend our annual Technical Symposium so this program was founded to help in this effort.

LP: Given where computer science education is now, where would you like to see the community go next?

BA: It's a bit difficult to predict. Two things: not new, but we should continue to emphasize them. One, we need to continue to push the dialog and promote outreach including bringing in more women and minorities. Major steps have been taken, but there is more to do. I think we also need to reach out to non-computer-based communities. We need to engage people outside of our CS community to learn how they can contribute (for example areas like psychology, advertising, experts in social media, etc.) Anyone with an interest in how to further create, replicate and promote positive (online and offline) educational experiences should be a part of these discussions.

Two, it's important to realize that education and teaching are not as valued as they once were. We see the problems that teachers are having nationwide, such as strikes over poor compensation, benefits and excessive teaching loads. Teachers are simply underpaid and undervalued in our society. We need to get that turned around. Our dedication, tools and perspectives can be used to help others. We should strive to raise the consciousness of people who don't realize how much work and

effort go into teaching and curriculum development. Also stress that education is critical if we are to stay competitive in a global market place. Preparing our young people for jobs/opportunities of the future is a key to education in general and CS in particular.

SIGCSE has worked to incorporate NCWIT and K-12 objectives (among others) to broaden our perspective. It's important to bring others into these discussions and to make a broader statement about the impact of what we do and teach. We need to underscore and repeat the message of the importance of CS. In addition, finding new funding sources to support these efforts should be a priority. The job market requires all students (and adults) to be computer literate. We are failing to provide sufficient numbers of students for the jobs of the future. Also our curriculum needs to make further progress in enabling access for young people of all ages to feel comfortable with technology and an understanding of the potential and limitations. Technology now plays a central role in everyone's life. This transcends jobs, education and age. I know many retirees that started using social media and the internet *after* they retired, just to keep in touch with their families so they are not left behind. This underscores our need to broaden our outreach outside of the typical CSE community.

LP: What do you see as our biggest challenge, either in research or community building, for the upcoming decade?

BA: I have some real concerns here. My message to the community is to beware the law of unintended consequences. When I read that the US announced it has the largest supercomputer available at Oakridge National Labs and that China is in the process of building an even faster system, my concern is that the technology is outstripping our ability to understand the concerns and implications of its capabilities. We have the biggest and the fastest computers. What are the implications of

these tremendously powerful machines or the reliability of the software running on it? How can we control this? This goes beyond hackers or other malicious entities disrupting our daily dose of social media. Computers now basically run much of our infrastructure. We need to integrate these concerns into our curricula. I'm really worried about our abilities to see where it's headed. The most powerful of these systems used to be available only to governments. However, as we have seen with Google, Facebook, Amazon, etc. the power of data is immense and available to an ever increasing number of users.

Joe Weizenbaum wrote a book in 1976 that talked about the power and limitations of computers. The title of the book is *Computer Power and Human Reason: From Judgment to Calculation*. We'd benefit as a community from spending more time and energy focused on the consequences of our advances and inventions.

In conjunction with that, the field of Artificial Intelligence (AI) is incredibly interesting. Advances made while I was doing research were rapid but don't compare to the number and scope of innovations which have grown significantly in the last decade. Now AI is leading us in many different directions. It's not just about bringing people into the field; we need to be asking questions such as "How powerful have major companies become and what can they glean from the data they have on us?" We have to be concerned about privacy and security issues. As Mr. Snowden and Cambridge Analytica have shown us, we are mostly oblivious to how much governments and corporations know about us and how they use this information to their advantage. This is possible since our laws are outdated for internet and cell phone usage. Again, the power of these systems boggles the mind and makes it almost impossible to predict the possible pitfalls and ramifications of such systems. If the "experts" struggle to see the future, how can

we expect the public to be aware of the dangers or possibilities of the rapid advances? Thus, it is crucial that we continually evolve and try to keep pace with the innovations so that our curricula stay current and relevant as we look to the future.

LP: I think there are many of us in the field who are concerned that we simply aren't prepared for the consequences of the technology we create. Where would you like to see us move as a community?

BA: One key step has been the ACM's renewed focus on ethics. I think courses in our curriculum are a first step, but we need to reach out to other fields to figure out not only how best to design such courses but ensure that we have broad support to implement and push for them to be implemented and kept current. Computer science can and should provide leadership in this discussion of ethics in the modern workplace. In my view most of our lives now revolve around our computers and phones. I also believe we need to make sure these discussions are happening more broadly in the curriculum and not just in CS, as it's even more important to educate the general population.

LP: How has your involvement in SIGCSE changed now that you're retired?

BA: I'm much less involved. I get calls from time to time, mainly from colleagues writing articles who want to verify what happened in the past. I've enjoyed writing a paper about the early days of SIGCSE for Inroads. There's a bit of overlap between what I'm putting together and the blog posts on SIGCSE's history which SIGCSE Board Member Briana Morrison has been releasing this year. However, my goal is a more personal article focused on the early days and fun anecdotes.

It's nice to serve as a resource to others. Also, I've been on several panels talking about the

history of SIGCSE. I keep up-to-date by reading the Bulletin and Inroads. As an ACM Fellow I try to stay current on ACM policy and activities - mostly online. The last SIGCSE symposium I attended was in Chattanooga in 2009.

LP: It sounds like you've been really active in the community after retirement. What do you do when you are not working? How do you enjoy yourself?

BA: I read, mostly mysteries. My favorite author is Dorothy Sayers. These days I listen to audiobooks as I walk. I also like to travel and try new restaurants.

I've always been active in athletics. I played baseball in high school and one year in college. Later I picked up handball, and even played in tournaments, many in the Southeast when I was at The University of Tennessee, and later when I moved to Philadelphia. I haven't been able to play handball since having a medical problem in 1994, but I still try to walk 2-3 miles most days. Last year I learned to fly fish. Now I am looking forward to a one week trip to Southwestern Montana later this summer to improve my (very) limited skills!

SIGCSE Global - Chengdu, China, May 17-19, 2019
By Susan Rodger

Save the date and think about attending SIGCSE Global, SIGCSE's newest conference. That's right, the SIGCSE Board is starting SIGCSE's fourth conference. SIGCSE Global will be held in Chengdu, China from May 17-19, 2019. Chengdu is the capital of China's Sichuan province. SIGCSE Global will be co-located with the annual ACM Turing Celebration Conference - China (ACM TURC). If you are not familiar with ACM TURC, it usually has several Turing award winners as keynote speakers. SIGCSE Global will overlap with ACM TURC so that you can attend those keynote sessions.

Why start another SIGCSE conference? First, our other three conferences are quite healthy. The SIGCSE Symposium in 2018 had over 1500 attendees, its largest number ever. The ICER conference has more than doubled in size since it started back in 2005. And the ITiCSE conference has been steady with around 180 or more attendees each year. Second, the SIGCSE Board would like to reach the computer science education community in all parts of the world. The SIGCSE Symposium is only held in North America. ITiCSE is only held in or near Europe, with one exception. In 2016, ITiCSE was held in Peru with great success. With ITiCSE quite successful in Europe, we would like ITiCSE to stay in Europe. ICER is held in North America every other year, in Europe every fourth year and in Australasia every fourth year.

SIGCSE Global will be held in countries where SIGCSE does not have annual conferences. So it will not be held in North America or Europe. For its first three offerings, we are planning on holding SIGCSE Global every other year. The first SIGCSE Global will be held in China in 2019. We are considering India for the second SIGCSE Global conference in 2021. We'd love

to hear from possible hosts for the third SIGCSE global.

What is the focus of SIGCSE Global? We are in the planning stages but imagine it to focus on research and practice, and to have several ways to participate with papers (research, experience, curricula, position, etc.), panels and posters, and likely more. More information and the conference call for participation will be out soon.

We are looking for input from SIGCSE members for what they would like SIGCSE Global to be. You can give us input at:

  https://sigcse.org/sigcse/events/global

Think about being a part of computer science education history in attending the first SIGCSE Global conference in China in May 2019.

Advancing Broadening Participation Research at RESPECT
By Jamie Payton and George K. Thiruvathukal

Understanding how to apply fundamental computer science problem solving skills is quickly becoming a required competency. It is critical to address issues of equity and inclusion so that we can engage all people in learning key concepts in computing. The **Conference for Research on Equity and Sustained Participation in Engineering, Computing, and Technology** (**RESPECT**) is intended to address these needs, serving to build a strong community, theory, and foundation for research on broadening participation.

The third convening of RESPECT took place on February 21, 2018 in Baltimore, Maryland, co-located with SIGCSE'18. The themes of equity and inclusion were, by design, pervasive throughout the RESPECT program. The conference program included research and experience papers that examined social, cultural, and economic factors related to the underrepresentation of women and people of color in computing disciplines; that explore how intersectional identities impact experiences of computing; and that propose interventions to mitigate implicit bias and to promote inclusive pedagogy in computer science classrooms, including through K12 teacher preparation. In addition, the 2018 RESPECT program featured a plenary panel jointly organized with Researcher-Practitioner Partnerships for CS (RPP for CS) project leaders; panel moderator Joanna Goode led discussion among panelists Richard Ladner, Ben Sayler, and Christopher Hoadley on "Designing for Broadening Participation."

Each RESPECT'18 submission received at least 3 reviews, and all submissions were discussed by the organizing committee. Of those submissions, 6 research papers and 8 experience reports were accepted (a 30% acceptance rate). Authors Jakita Thomas,

Nicole Joseph, Arian Williams, Chan'Tel Crum and Jamika Burge were recognized with the RESPECT'18 Best Research Paper Award for their work on "Speaking Truth to Power: Exploring the Intersectional Experiences of Black Women in Computing." The RESPECT'18 Best Experience Report Award was awarded to Jonathan Reynolds, Carol Frieze, Diana Marculescu, Jeria McKnight and Gerry Katilius for their report "Where are you really from?: Mitigating Unconscious Bias on Campus." The RESPECT'18 proceedings are under submission for inclusion in IEEE Xplore.

The Fourth Annual Conference on **Research on Equity and Sustained Participation in Engineering, Computing, and Technology** (RESPECT'19) will be co-located with SIGCSE on Feb. 27, 2019 in Minneapolis, MN. We encourage you to add your voice to the discussion around broadening participation in computing! Contributions from researchers and practitioners in computer science, education, learning sciences, cognitive or social psychology, social sciences, and related disciplines are welcome. For more information, visit http://respect2019.stcbp.org/. RESPECT is supported by technical co-sponsorship by the IEEE Computer Society and the IEEE Special Technical Community on Broadening Participation (STCBP), ACM in-cooperation status, NSF grant CNS-1042468, and the STARS Computing Corps.

SIGCSE Chair's Report Preview
By Amber Settle

The annual SIGCSE report is submitted each July to ACM, and the follow is a preview of the report.

Two of the three SIGCSE conferences had record-breaking attendance in the past year. ICER 2017 had 157 attendees, and the 2018 SIGCSE Symposium had 1731 attendees! While the 228 attendees at ITiCSE 2017 was not (quite) a record, it certainly was a very strong showing.

SIGCSE gives two annual awards. The SIGCSE Award for Outstanding Contribution to Computer Science Education was presented to Tim Bell for his significant and lasting impact on computing education internationally through the development of innovative resources and activities, such as "CS Unplugged," that inspire and engage students and teachers at all educational levels. The SIGCSE Award for Lifetime Service to Computer Science Education was given to Eric Roberts for outstanding service to computing education, making significant contributions to computing curricula and pedagogy, and generously sharing his knowledge and wisdom through mentoring and guidance to others in the computing education community.

ICER 2017 had two best paper awards. The Chair's Award is selected by the organizing committee and was presented to Holger Danielsiek, Laura Toma, and Jan Vahrenhold for their paper "An Instrument to Assess Self-Efficacy in Introductory Algorithms Courses." The ICER 2017 John Henry Award is selected by the conference attendees and was presented to Kathryn M. Rich, Carla Strickland, T. Andrew Binkowski, Cheryl Moran, and Diana Franklin for their paper "K-8 Learning Trajectories Derived from Research Literature: Sequence, Repetition, Conditionals."

In 2018 the SIGCSE Symposium gave three best paper awards. The Best Experience Report Paper was awarded to Fredrik Heintz and Linda Mannila for "Computational Thinking for All: An Experience Report on Scaling up Teaching Computational Thinking to All Students in a Major City in Sweden." The Best New Curricula, Programs, Degrees, and Position Paper was presented to Sathya Narayanan, Kathryn Cunningham, Sonia Arteaga, Joe Welch, Leslie Maxwell, Zechariah Chawinga, and Bude Su for "Upward Mobility for Underrepresented Students: A Model for a Cohort-based Bachelor's Degree in Computer Science." The Best CS Education Research Paper was awarded to Christine Alvarado, Gustavo Umbelino, and Mia Minnes for "The Persistent Effect of Pre-College Computing Experience on College CS Course Grades."

ITiCSE 2018 has nine working groups on a wide range of topics. Be sure to watch for the papers produced by the working groups, which will be part of the annual CD compilation of conference proceedings mailed to all SIGCSE members in early 2019.

A Doctoral Consortium was run in Tacoma, Washington, USA just prior to ICER 2017 which was attended by nineteen graduate students in computer science education, each of whom received travel grants from SIGCSE. The SIGCSE Board will continue to fund up to twenty Doctoral Consortium grants in 2018.

SIGCSE has a Travel Grant Program for faculty and teachers who have never attended the SIGCSE Symposium. Nine awards were given for the 2018 Symposium, including a high school teacher and one recipient from Chile.

My thanks to all the SIGCSE Board members and volunteers for a record-breaking year! The full SIGCSE Chair's Report will be published on sigcse.org in August.

2018 SIGCSE Travel Grants
By Adrienne Decker, SIGCSE Treasurer and Travel Grant Program Chair

The SIGCSE Board is pleased to announce the opening of applications for the 2018 Travel Grant Program. The Travel Grant Program was established through a generous donation by Henry Walker to support faculty and teachers who have not yet had an opportunity to attend the SIGCSE Symposium.

Faculty and teachers who have never attended the Symposium and do not have institutional support to attend are encouraged to apply for the program using this online form. Completion of the form requires some basic demographic information, a SIGCSE member number, and a two-part essay that includes a brief description of how attendance will benefit the applicant and how the applicant plans to share what he/she has learned with his/her community.

Applications for the 2019 Symposium must be received by October 15, 2018 to be considered. Due to reviewing constraints, no late applications will be accepted. Please encourage faculty and teachers at your institution who could benefit from Symposium attendance to apply. More information about the program and the application process can be found on the Travel Grant Program page: http://sigcse.org/sigcse/programs/travel-grants.

If you have questions about the Travel Grant Program that are not answered by the page listed above please contact the Travel Grant Program committee at this link. The travel grant program continues to be supported by donations from SIGCSE members to the fund and is always accepting donations. Contact the travel grant program committee at the link above for more information about how to donate to this fund.

2018 SIGCSE Special Project Grants
By Sue Fitzgerald, SIGCSE Board Secretary

Since 2003, SIGCSE has awarded grants to help SIGCSE members investigate and introduce new ideas in the learning and teaching of computing. Projects provide clear benefits to the wider disciplinary community in the form of new knowledge, developing or sharing of a resource, or good practice in learning, teaching, or assessment. The next deadline for submissions is November 15, 2018. For additional information, see: http://sigcse.org/sigcse/programs/special/ Questions are welcome and should be sent to apply@sigcse.org. Proposers must be ACM/SIGCSE members.

The SIGCSE Board is pleased to announce the May 2018 SIGCSE Special Projects grant awards. Three of fourteen applications were funded, with an acceptance rate of 21%.

CS Identity Development Interview Project
Amanpreet Kapoor
Christina Gardner-McCune
University of Florida
Award: $3,078

This project focuses on the development of professional identity in computer science students. Drs. Kapoor and Gardner-McCune will identify ways in which computer science students engage in communities of practice and will measure the amount of time students spend in professional experiences outside the classroom. The impact of these experiences on the development of professional identity will be explored through a qualitative study. The results of the study will include profiles of successful students and recommendations for faculty.

Developing a Serious Game to Reinforce Introductory Programming Concepts
Devorah Kletenik
Deborah Sturm
Brooklyn College, City University of New York
Award: $5,000

Drs. Kletenik and Sturm will create a game to introduce programming concepts to undergraduate students. The game will include a storyline, sound effects, graphics, power-ups and short quiz-like challenges. It will provide students with an opportunity to practice their programming skills. The game is intended for a broad audience; gamers and non-gamers, females and underrepresented groups will be consulted during the creation of the game. In addition, a wide-scale evaluation of the effectiveness of the game will be performed. The game will be available as a WebGL and will be playable in a browser without downloading or installation. It will be released under a Free Software license, enabling others to modify the game if so desired.

Developing and Testing Activities Introducing Elementary School Students to Artificial Intelligence
David Touretzky
Carnegie Mellon University
Award: $4,440

Dr. Touretzky will develop hands-on activities designed to introduce elementary school children to artificial intelligence concepts. Activities will include topics such as computer vision, face and voice recognition, speech generation, navigation and robotics. The project will include twice-weekly instruction for over 300 elementary school children during academic year 2018-2019. Learning outcomes and student interest in AI will be measured. In addition, PowerPoint slides and supplementary materials will be developed for the classroom teachers. Materials will be cataloged in a resource directory supported by the Advancement of Artificial Intelligence (AAAI) and the Computer Science Teachers Association (CSTA).

Deadlines and Upcoming Dates!

Aug 3	Koli Calling 2018 All submissions due
Aug 13-15	ICER 2018, Espoo, Finland
Aug 24	SIGCSE 2019 Paper abstracts due
Aug 31	SIGCSE 2019 Full Papers, Panels, Special Sessions & Workshop submissions due
Oct 15	SIGCSE 2019 Travel Grant Applications due
Oct 19	SIGCSE 2019 Nifty Assignments, BoFs, Posters, Demos, Lightning Talks, SRC, Pre-symposium events proposals due