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## SIGCSE News in Brief

This issue of the Bulletin celebrates computer science and those who promote it. First, CSEdWeek activities abound! Learn about what your colleagues across the country did to celebrate Grace Hopper's birthday and promote computer science education in the article *What We Did: CSEdWeek*.

Next we feature interviews with the winners of the two SIGCSE 2013 awards—Michael Kölling of the University of Kent and Henry Walker of Grinnell College—in our new Member Spotlight column. Then SIGCSE Treasurer Doug Baldwin reports on the winners of the Special Projects grants.

Speaking of celebrating, SIGCSE conference co-chair Tracy Camp, Colorado School of Mines, gives us a preview of what we have to look forward to at the 2013 SIGCSE Symposium.

On a more technical note, SIGCSE Information Co-directors Will Turner and Frank Young bring us updates on the SIGCSE mailing lists, and *Inroads* Editor-in-Chief John Impagliazzo and Board member Amber Settle bring information about the new *ACM Inroads* website.

### Newsletter Credits

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## What We Did: CSEdWeek 2012

During CSEdWeek, computer scientists reach out to their communities to inform public perceptions about what computer science is, the crucial role it plays in our society, the career opportunities it provides, and to launch new efforts to invigorate CS education at all levels. CSEdWeek is celebrated the second week of December to coincide with Grace Hopper's birthday on December 9. Take a look at what some SIGCSE members did to celebrate this year. For more information about CSEdWeek see <http://www.csedweek.org/>.



### University of Alabama, Auburn University & United Cerebral Palsy of Alabama

by Jeff Gray, University of Alabama, Photos by Matt Nelson, United Cerebral Palsy of Birmingham

With support from the Computer Science Collaboration Project, the "Computer Science Fun Day" workshop was held December 10, 2012. The event introduced children with disabilities and their family members to various topics in Computer Science using CS Unplugged, App Inventor, Scratch, and Lego NXT robots. Assistive technologies available to help students gain access to such tools were also discussed. A pizza dinner and inquiry-based activities rounded out the workshop. The event was hosted at the Lakeshore Foundation, Birmingham, Alabama, which assists persons with physically disabling conditions.



### Rutgers University

by Lars Sorenson, Rutgers University

The Rutgers University Computer Science department celebrated CSEdWeek by hosting the inaugural meeting of the new Central New Jersey CSTA Chapter. After a successful Google CS4HS summer workshop, the founders of the CS Outreach group, Lars Sorenson and Fran Trees, kept in touch with local teachers and it soon became apparent that the teachers wanted their own CSTA chapter for Central New Jersey. Helmed by Daryl Detrick of Warren Hills High School in New Jersey, the new chapter will serve the growing community of High School (and Middle School!) Computer Science teachers in Central New Jersey, offering guidance and professional development opportunities. The first meeting, held on December 11th, was a big success and a fitting way for Rutgers and the new CNJ-CSTA to celebrate CSEdWeek.

# What We Did: CSEdWeek 2012 continued



## University of Washington by Helene Martin, University of Washington

On December 8th, we invited middle and high school students and their families to join us for a computing open house to celebrate Grace Hopper's birthday and the start of CSEdWeek. We received 750 RSVPs and at least that many people showed up for the 2-hour event! Participants cycled through 28 stations throughout our building to complete short hands-on activities related to different aspects of computing. Our goal was to provide a broad perspective on computing subfields and possible careers – we invited the Electrical Engineering, Informatics and Human Centered Design and Engineering departments to provide stations along with several local companies. For more info, see our website:  
<http://www.cs.washington.edu/openhouse>

We also hosted a programming competition organized in conjunction with our local CSTA chapter, which was

generously sponsored by Microsoft, on December 15th to celebrate the end of CS Education Week. The 74 teams of 1-3 students represented 26 different local schools! More information is available at our website:  
<http://www.pscsta.org/2012/12/december-programming-contest-report.html>



## The College of New Jersey by S. Monisha Pulimood, TCNJ, photos by Edward Kim and S. Monisha Pulimood

We hosted 'Celebration of Computing' on December 5, 2012. The event included:

- Computing-related games, puzzles, brain teasers and other fun activities sponsored by student organizations.
- Student poster presentations where CS majors presented the research and internship projects they have been involved in this year.
- A career workshop with opportunities for one-on-one mock interviews and resume reviews with potential employers.
- A Upsilon Pi Epsilon ceremony to induct new members.

# What We Did: CSEdWeek 2012 continued



## Loyola University Maryland

by Roberta Evans Sabin, photo by M. Raunak

At Loyola University Maryland, faculty and students of the Computer Science Department celebrated CSEdWeek by taking to the Quad on December 10, the last day of classes, to encourage students to thank their computers. One of the departmental robots, bearing a sign about the week and pointing the importance of computers and the folks who design and program them, accosted students and offered them candy. There were many takers!



## Harvey Mudd College

by Z Sweedyk, photos by Z Sweedyk and Tim Taylor

Students from the Harvey Mudd College software development course, CS121, visited Armstrong Elementary School to celebrate CSEdWeek. We user tested educational iPad games developed during the semester with two classrooms of 6<sup>th</sup> graders. The games aimed to teach math, science, and ancient history. We also talked about all the wonderful projects – beyond building games – that computer scientists work on.

And, of course, we all had some Grace Hopper birthday cake.

The 6<sup>th</sup> graders loved our games. Who knew fractions could be so much fun!



## MEMBER SPOTLIGHT

*In this new feature of the Bulletin, we highlight recent accomplishments of our members. For this issue, we include interviews with the two winners of the 2013 SIGCSE awards.*

### Michael Kölling

*Bulletin co-editor Christine Alvarado interviewed Michael Kölling, University of Kent, who won the 2013 SIGCSE Outstanding Contribution to Computer Science Education Award:*



*Michael Kölling, University of Kent, photo by K. Wachholz*

CA: What does winning this award mean to you?

MK: It feels fantastic to be recognised in this way by my community. It is a great honour, and a somewhat

humbling experience to join the list of previous recipients, which includes many names of people whose work I admire. More practically, the associated publicity helps to improve the standing of computer science education as a field of work and research in our department, and that is always welcome.

CA: What inspired you to pursue the field of computer science education?

MK: I was always passionate about computer science and about teaching. So combining the two was a natural fit for me. Initially, I started by building tools that I wanted for myself, for my own teaching, because I could not find tools that did what I wanted to do.

CA: How did you and your collaborators first develop the ideas for BlueJ and then for Greenfoot?

MK: BlueJ was inspired by my own experience of teaching object-oriented programming at university. I found myself drawing lots of diagrams on the board, and I wanted a tool that integrated these views with the actual programming. Greenfoot was later developed when we realised that all the important formative encounters that students have with programming do not happen at university anymore, but at K-12 school. So we wanted to get to the kids at that age, and built a new tool for them.

CA: From your perspective and experience, why have BlueJ and Greenfoot been so revolutionary for computer science education?

MK: BlueJ was just earlier than most other tools of that kind. When we started, teaching object orientation had become accepted, but few dedicated tools were available to learn or teach it. We added a number of new kinds of tools to the environment, especially interaction and visualisation tools, that were novel at the time and turned out to be very useful. I was surprised that these were not copied more quickly by the large IDE developers, such as Microsoft, but I guess there is not enough business in education tools.

When we designed Greenfoot, a number of other environments were developed at the same time that did similar things, such as Scratch. In retrospect, the time seemed ripe for graphical, interactive teaching tools. Several tools, including Greenfoot and others, became very popular. I think the unifying characteristic is that they all are based on an understanding of both technology and pedagogy.

CA: Do you have any anecdotes or stories to share about the impact your work has had on individual students?

MK: We get many emails from individuals telling us what they did with our tools, especially with Greenfoot. Often, students write that they tried to learn programming before, but without much success. And Greenfoot made it accessible and interesting for them.

CA: What do you like to do when you're not working on computer science education?

MK: I cycle a lot, often through the Kent countryside, and I play guitar a bit. I spend time with my children, and I like good restaurants!

### Henry Walker

*Bulletin co-editor Z Sweedyk interviewed Henry Walker, Grinnell College, who won the 2013 SIGCSE Lifetime Achievement Award:*



*Henry Walker, Grinnell College*

ZS: When and how did you first become involved with SIGCSE?

HW: After earning my Ph.D. from M.I.T., I moved to Grinnell College for a faculty position in mathematics. I

then became interested in computer science; in 1979, I received an MS in computer science from the University of Iowa. About that time, I started attending the wonderfully diverse Computer Science Conference (CSC) sponsored by ACM. At the end of the week, SIGCSE had its own conference, so I could attend both CSC and the SIGCSE Symposium with one trip and a combined conference registration.

ZS: How has your career as a computing educator evolved over time?

HW: Over the years, I have had a wide range of interests, particularly in the fields

of curricula, pedagogy, and supporting environments. In some cases, my work has had a common theme: For example, I have collaborated with members of the Liberal Arts Computer Science Consortium on their curricular recommendations for liberal arts programs in 1986, 1996, and 2007. I have also worked on many projects to promote lab-based, collaborative learning — particularly in introductory courses.

ZS: What has been your role in SIGCSE?

HW: I first was invited to participate on a conference committee in 1991. This initial exposure encouraged me to become SIGCSE Secretary/Treasurer for 1993-2001. I served as Program Chair for SIGCSE 2000 and Symposium Chair for 2001. In 2001, I was fortunate to be elected SIGCSE Chair, with re-election in 2004. Since then I served on the SIGCSE Board as Immediate Past Chair and then as SIGCSE Bulletin Co-Editor. Altogether, I served on the SIGCSE Board in an official or ex-officio capacity for about 19 years.

ZS: Tell me about your efforts to improve the SIGCSE submission system.

HW: In 2000, SIGCSE had a paper-based submission and review system. I collaborated with my wife Terry (a web-developer), two students, and Grinnell's Computer Services to develop a system that allowed authors to submit papers in either hard copy or electronic form. With electronic submission solving many logistics issues, we could open reviewing to reviewers throughout the world.

ZS: What, for you, has been the most rewarding aspect of your involvement in SIGCSE?

HW: When I was elected chair, SIGCSE membership had been in a modest but steady decline for about a decade. SIGCSE ended the 2001 fiscal year with

1908 members and was the ninth largest of approximately 34 SIGs. During my time as Chair, the Board took several actions to involve and recruit members; e.g. adjusting conference registration fees and opening reviewing to all SIGCSE members. At the end of the 2006 fiscal year, SIGCSE had 2587 members, an increase of about 35% over 2001. It now ranks as the 4th largest SIG, overtaking SIG PLAN by 27 members this past year.

Overall, this growth in SIGCSE suggests that the organization is meeting some important needs of computing educators through a range of initiatives by many people. I am delighted that I was able to be part of this overall effort.

ZS: What do you feel is your most important contribution to SIGCSE?

HW: My general approach has been to listen to people's ideas, appoint or encourage insightful and motivated people, and allow these individuals or groups to make their own contributions. I would like to think that I have been helpful in my activities, but most/all efforts within SIGCSE have involved a strong collaboration among many talented people.

ZS: What would you tell new members in our community about getting involved?

HW: I encourage new members to sign up to review conference papers. Another traditional area for contributions has been on conference program committees. If you are interested in serving on a conference committee, inquire who is heading a conference 2 years from now, as committee organization is probably underway. More generally, SIGCSE needs new ideas as well as help with ongoing projects. If you have ideas for new programs or refinements of current activities, I strongly encourage SIGCSE members to contact the current SIGCSE Board.

## SIGCSE Special Projects Awards

by Doug Baldwin, SIGCSE Treasurer

SIGCSE received 20 Special Projects grant proposals for the November 2012 deadline, with proposers requesting a total of over \$90,000. It's truly rewarding to see so much creativity and energy in SIGCSE. We're sorry we couldn't fund more of the projects, but the Special Projects Committee is pleased to announce that the following three grants have been awarded:

Chris Johnson (University of Wisconsin at Eau Claire), "Keystrokes: A System for Capturing Textual Development in Video-based Learning." The project will develop a software tool that captures text during video creation and exports it in a form that students can interact with.

Brad Miller and David Ranum (Luther College), "Enhancing an Interactive Textbook with Community Moderated Exercises." This project extends an existing interactive textbook creation platform (<http://interactivepython.org/>), to support programming exercises for which students can post solutions for community review.

Allison Tew (University of Washington at Tacoma) and Brian Dorn (University of Hartford), "Computing Attitudes Survey (CAS) Validation Project." The Computing Attitudes Survey is a questionnaire that measures the extent to which students hold "expert-like" attitudes towards computing. This grant funds large-scale validation studies that should enable use of the survey in a wide variety of computing education research projects.

The deadline for the next funding cycle is May 15, 2013. See our website for more information on how to apply: [www.sigcse.org/programs/special/apply/](http://www.sigcse.org/programs/special/apply/).

## SIGCSE Symposium 2013 Preview

by Tracy Camp, Symposium Co-Chair



SIGCSE 2013 continues our long tradition of bringing together colleagues from around the world to discuss computer science education. The annual SIGCSE Technical Symposium will be held in Denver this year starting on March 6th. The theme of this year's symposium is "The Changing Face of Computing" and will feature a number of talks and sessions focused on how changes in computing technology and changes in student demographics require a change in the way computing is taught. Example highlights unique to SIGCSE 2013 include:

- What can *WE* do to change the face of computing? The opening keynote at SIGCSE 2013 will offer answers to this important question in a format unlike anything seen at SIGCSE previously. We'll have energetic "flash talks," where each speaker will have five minutes to share 20 slides, which advance automatically.
- Popcorn anyone? For the first time at SIGCSE, we'll show a movie following the Thursday night reception. This movie describes the remarkable and tragic story of Alan Turing, one of the 20th century's most important people. The Executive Producer of this drama-documentary will provide a Q&A session following the movie.
- Will massively open online courses (MOOCs) change our universities or be a "flash in the pan"? SIGCSE 2013 will have a special keynote session where Stanford's Provost, John Etchemendy, will offer his view of this critical question.
- Do you like puzzles? At SIGCSE 2013 we'll have a "puzzle extravaganza". If attendees solve eight 'puzzles', they'll have enough information to unlock the big puzzle solution. We'll have a raffle during lunch on Saturday for those who solve this big puzzle.
- Want a tool to assist you in meeting your professional networking goals? SIGCSE 2013 attendees will have the option to opt in to a searchable online conference attendee booklet (that is kept behind a login facility).

The Symposium web site, <http://www.sigcse.org/sigcse2013>, provides more information. Early registration for SIGCSE is available until February 6th, 2013.

## Life as SIGCSE Information Co-Director: The Error Messages

by Will Turner and Frank Young, SIGCSE Information  
Co-Directors

Once upon a time, a long time ago, the SIGCSE lists were configured to automatically delete subscribers who had "too many" delivery problems. Alas, some subscribers were inappropriately deleted. So we, the list moderators, now do deletions manually. We now receive over 300 messages each month. For example:

- The email account that you tried to reach does not exist.
- (while not connected): 554 5.4.7 [internal] exceeded max time without delivery
- A problem occurred during the delivery
- <Message in Japanese> (rejected by system)
- Message rejected by Google Groups.
- Message rejected as spam by Content Filtering.
- Message blocked due to spam content in the message.
- procmail -f- || exit 75 #<ID>" (reason: Can't create output)
- Message rejected due to content restrictions

You can help improve our lives!

1. Ensure your email box does not fill up when you are unable to access it.
2. Notify [infodir@sigcse.org](mailto:infodir@sigcse.org) when your email address changes.
3. Put messages from SIGCSE-members @LISTSERV.ACM.ORG or that contain "[SIGCSE-members]" or "[SIGCSE-announce]" in the subject line on your "must be delivered, do not check for SPAM" list.
4. Tell your email service to respond to requests regarding non-delivery of mail.

We sincerely thank you.

## Changes to the SIGCSE Lists

by Will Turner and Frank Young, SIGCSE Information  
Co-Directors

The following policies and procedures for the SIGCSE lists will be changed over the next few months.

1) SIGCSE-announce will become an opt-out list and will use the email address that subscribers use for ACM contacts. SIGCSE-announce will continue to be used only for **official** SIGCSE announcements. These include information about SIGCSE sponsored conferences, SIGCSE awards, SIGCSE business, SIGCSE publications, etc.

2) SIGCSE-members will become an opt-in list and subscribers may use any email address they wish.

Most list policies will remain unchanged. Subscriptions to the lists will continue to be restricted to members of SIGCSE. Postings to SIGCSE-announce must be made by an appropriate officer or committee chair of SIGCSE. Postings to SIGCSE-members must be made by a subscriber – with the exception of "opportunity" postings (job openings, research opportunities, etc.). The subject line of all postings will continue to have the text "[SIGCSE-members]" or "[SIGCSE-announce]" inserted at the beginning of their subject line, as appropriate.

SIGCSE members can prepare for this change by checking whether the email address that is listed for them at ACM is indeed a valid and appropriate one. To do so one must follow the instructions at [myacm.acm.org/dashboard.cfm?svc=account](http://myacm.acm.org/dashboard.cfm?svc=account) to first set up an ACM account (if you do not have one) and then examine and modify the information that is associated with your membership.

Send questions to: [infodir@sigcse.org](mailto:infodir@sigcse.org).

## ACM Inroads: The Website

by John Impagliazzo, Editor-in-Chief *ACM Inroads*,  
and Amber Settle, *ACM Inroads* Web Administrator

As you are no doubt aware, *ACM Inroads* is a quarterly magazine with the aim of advancing computing education by generating and sharing new insights into the theory and practice of computing education. Through editorial pieces and summaries of original research, authors who contribute to *ACM Inroads* examine and advance current research and practice in computing education.

*ACM Inroads* now has a website (<http://inroads.acm.org/>) and a blog (<http://inroads.acm.org/blog/>). The website contains information about the current and past issues of the magazine, information for authors, upcoming community events, and information about special interest groups and the ACM. The website also provides an overview of the content available in each issue, and the full articles are available to anyone with access to the ACM Digital Library. Those without Digital Library access can subscribe to *ACM Inroads* or join SIGCSE. Complementing the new website is the creation of a new digital edition of the magazine, which provides enhanced navigation, search, linking, and browsing features.

You are invited to visit the *ACM Inroads* website and explore the online content. Of special interest are people with ideas for a post or series of posts to the blog. Anyone with potential blog contributions or suggestions for changes to the website should contact the *ACM Inroads* web administrator, Amber Settle ([asettle@cdm.depaul.edu](mailto:asettle@cdm.depaul.edu)).

## Conference Update



The 44<sup>th</sup> ACM Technical Symposium on Computer Science Education (SIGCSE 2013) will be held March 6-9, 2013 in Denver, CO, USA. More information is available at the conference web site: <http://www.sigcse.org/sigcse2013/>



The 18<sup>th</sup> annual Conference on Innovation and Technology in Computer Science Education (ITiCSE 2013) will be held at the University of Kent, Canterbury, England on July 1-3, 2013.

The deadline for Tips, Techniques and Courseware as well as Posters is March 15, 2013. More information is available at the conference website: <http://www.cs.kent.ac.uk/events/iticse2013/>



ICER 2013 will be held August 12-14 at UCSD, San Diego, CA