



Special Interest Group for Information Technology Education



Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*



# SIGITE

ACM Special Interest Group on IT Education

# NEWSLETTER Vol. 10, Issue 2, Dec. 2014

ISSN: 2166-1685

# TABLE CONTENTS

---

## 01 SIGITE NEWS

Editor's Note	02
Message from SIGITE Chair	05
SIGITE Executive	06

## 02 SIGITE/RIIT 2014

Conference Report	08
Academic Report	09
Top Papers	10
Survey Results	12
Upcoming Conferences	13

## 03 SIGITE/RIIT 2015

Coming Sooner Than You Think	15
------------------------------	----

---

# EDITOR'S NOTE

Welcome back to the *SIGITE Newsletter*. The main event this year was the 15th annual conference on Information Technology Education and the 3rd annual Research in IT conference which were both held in Atlanta in October. This edition of the newsletter provides information and highlights from that conference as well as some information about next year's conference in Chicago.

Randy Connolly  
*Mount Royal University, Calgary*

## ACM SIGITE Newsletter - Volume 10, Issue 2, December 2014

ISSN

2166-1685

Email: [rconnolly@mtroyal.ca](mailto:rconnolly@mtroyal.ca)

Editor

Randy Connolly

Web: [www.sigite.org](http://www.sigite.org)



**DR. ROB FRIEDMAN**  
**SIGITE CHAIR**

# MESSAGE FROM OUR CHAIR

## Dear Members

From the looks of our survey results, SIGITE conferences the last couple of years have been enjoyed by the majority of attendees, with satisfaction derived from both the content and the context of the co-located events, SIGITE and RiIT. For the past two years, conference organizers, in particular Amber Settle and Terry Steinbach, have created surveys that lead to the positive conclusions I'm about to summarize, so a big 'Thank You' to our quality control team from Chicago's DePaul University, whose report I will borrow heavily from here. Southern Poly hosted the two conferences, with attendance of 129, one of the largest yet. 73 respondents (57% return) provided fodder for the following snapshot:

Half primarily attended SIGITE, a tenth primarily attended RiIT, and a third split their time evenly between the two conferences.

82% thought the program was either excellent or very good; only one person found the program to be "fair," but no one had no opinion.

The keynote address fared a bit less well, with 40% rating it highly and a quarter of the respondents having no opinion at all.

4% thought the technical papers were "fair," while 65% rated them either "excellent" or "very good."

Not surprisingly, panels and workshops had higher "no opinion" responses than any other value, 45% and 59% respectively; those who did respond checked, pre-

dominantly, "excellent" or "very good."

A big hit of the content side of the conference were the lightning talks, and the sponsor presentations and table availability were also rated positively.

Regarding venue and facilities – oh, what three drink coupons will do. As Amber reports, "All of the aspects of the venue and facilities were rated at or above very good, except for the morning and afternoon breaks which were slightly below very good. There was overwhelming support for the execution of this part of the conference."

As for the conference organizational elements (web site, registration process and general organization), high ratings as well. One pleasantly surprising result for me was that access of the proceedings via the ACM DL prior to and during the conference was thought to be helpful to three of four responding attendees.

Next year in Chicago, attendees would like to see a larger conference (more days, more sessions) and opportunities to engage the local scene (tours of the city and/or local tech businesses). I have no doubt that our hosts will make sure the local experience is superb, and it's up to you IT educators to keep the bar high in terms of papers, posters, lightning talks, workshops, panels and the level of support of each other and our enterprise that SIGITE conferences have become known for.

**Dr. Rob Friedman**

*University of Washington, Tacoma*

# SIGITE EXECUTIVE

## CHAIR



**Rob Friedman**

University of Washington, Tacoma

## VICE CHAIR



**Mihaela Sabin**

University of New Hampshire

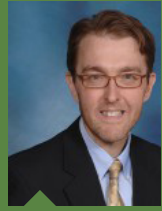
## SECRETARY



**Rick Homkes**

Purdue University

## PAST CHAIR



**Mark Stockman**

University of Cincinnati





# **SIGITE/RIIT 2014** **REPORT**

# SIGITE/RIIT 2014 REPORT

October 15-18, Atlanta, Georgia



The SIGITE/RIIT 2014 Annual Conference was held at the Atlanta Buckhead Marriott Hotel and Convention Center. The hotel was right across the street from Lenox Square Mall and very close to public transportation. Attendees were treated to wonderful food during the event with many great comments about our evening reception.

Southern Polytechnic State University was the host institution for the conference. We had 129 attendees (including 20 students from Southern Polytechnic State University). The students helped support the registration desk and assisted where needed throughout the conference. Various faculty and staff volunteers from Southern Polytechnic worked diligently to make the conference a success.



## **The speaker for the conference was**

Dr. Flavio Villenostre from Lexis Nexis. Lexis Nexis also provided several gifts for door prizes. Lexis Nexis has been a great supporter of Southern Polytechnic. The conference feedback from attendees was very positive.

**Becky Rutherford**

*Conference Chair SIGITE/RIIT 2014*



# ACADEMIC REPORT

## SIGITE/RIIT 2014

### Numbers - SIGITE/RIIT 2014 - Atlanta

#### The joint theme for the SIGITE/RIIT

was *"Riding the Wave of Change in Information Technology."* **The response to the call for proposals was up from previous years, with 111 submissions**, 72 of which were submitted to SIGITE and 39 to RIIT. Ninety-five of the submissions were papers with 59 papers submitted to SIGITE and 36 papers to RIIT. Twenty-seven papers were accepted to SIGITE for an acceptance rate of 46%, and fourteen papers appeared in RIIT for an acceptance rate of 39%. Among the accepted submissions, networking, security, and development remain popular with researchers, and interest in mobile computing, resource measurement and management, capstone courses, and personalization has grown.

A best paper was chosen from each conference, which are both highlighted on the following pages. Both best paper awards included student authors which suggests that the SIGITE and RIIT communities have a bright future.

Conferences cannot happen without the help of reviewers, and SIGITE 2014 and RIIT 2014 were no exception. Fifty-five reviewers worked diligently to ensure that every paper had at least three independent reviews. New to the conferences this year was a meta review process, in which 13 diligent meta reviewers together examined all reviews for each submission and reconciled those reviews into a coherent message for

each author. The goal of the meta review process was to provide authors with more substantive and consistent feedback on their work, whether it appeared in the final program or not.

Amber Settle

Terry Steinbach

Program Chairs SIGITE/RIIT 2014



**Acceptance  
Rate  
at RIIT 2014**

**Fifty-five reviewers worked diligently to ensure that every paper had at least three independent reviews.**

# TOP PAPER

## SIGITE 2014

### Automatically Detectable Indicators of Programming Assignment Difficulty

**Petri Ihantola**

Aalto University

**Juha Sorva**

Aalto University

**Arto Vihavainen**

University of Helsinki

<http://dl.acm.org/citation.cfm?id=2656476>

The difficulty of learning tasks is a major factor in learning, as is the feedback given to students. Even automatic feedback should ideally be influenced by student-dependent factors such as task difficulty. We report on a preliminary exploration of such indicators of programming assignment difficulty that can be automatically detected for each student from source code snapshots of the student's evolving code. Using a combination of different metrics emerged as a promising approach. In the future, our results may help provide students with personalized automatic feedback.

# TOP PAPER

## RIIT 2014

### Printer Watermark Obfuscation

**Maya Embar**

Illinois Institute of Technology

**William Wesselmann**

Illinois Institute of Technology

**Louis McHugh**

Illinois Institute of Technology

**<http://dl.acm.org/citation.cfm?id=2656437>**

Most color laser printers manufactured and sold today add „invisible“ information to make it easier to determine when a particular document was printed and exactly which printer was used. Some manufacturers have acknowledged the existence of the tracking information in their documentation while others have not. None of them have explained exactly how it works or the scope of the information that is conveyed. There are no laws or regulations that require printer companies to track printer users this way, and none that prevent them from ceasing this practice or providing customers a

means to opt out of being tracked. The tracking information is coded by patterns of yellow dots that the printers add to every page they print. The details of the patterns vary by manufacturer and printer model.

In this document, our team will discuss several obfuscation methods and demonstrate a successful one.

Included in this document is an explanation of the firmware generated yellow dots matrix and answers to the following questions: 1. Which printers produce the dots? 2. How are the dots put on? 3. What is needed for testing? 4.

What is the dot size and spacing? 5. Where are the dots located on the page? 6. How can the dots be rendered useless?

# WHAT DO YOU THINK?

## Survey Results - SIGITE/RIIT 2014 - Atlanta

**SIGITE/RIIT 2014 attendees** submitted surveys

**57%**

As with last year's conferences, the organizers of SIGITE/RIIT 2014 asked conference attendees to complete an evaluation. There were 73 responses to the conference evaluation, for a 57% response rate. A majority of responses (38 or 52%) reported that they primarily attended SIGITE sessions. Eight respondents (11%) attended primarily RIIT sessions, twenty five (34%) attended both conferences equally, and two (3%) indicated other. **All aspects of the program (papers, panel, workshops, lightning talks, the keynote, and the sponsor interactions) were rated at or above good, with the workshops and the lightning talks particularly praised with an average rating of very good.** All aspects of the venue and facilities were rated at or above very good, indicating overwhelming support for the logistical execu-

tion of the conference. The web site, registration, and general organization were rated at or above good, and respondents felt that the proceedings were on average very good. The vast majority of respondents (54 or 76%) indicated that having access to the proceedings via the ACM Digital Library before and during the conference was helpful.

When asked in an open-ended question about the positive aspects of SIGITE/RIIT 2014, the people and networking opportunities as well as the quality of the papers were mentioned several times. The importance of being able to see what is happening in IT education and IT research was also mentioned as a positive. When asked how the conferences could be improved, several comments suggested improving the quality of the presentations and keynote.

Changes to the structure of parallel sessions and the conference submission site were mentioned by a few respondents. Responses to the open-ended question asking what would make SIGITE/RIIT 2015 better conferences included an expansion of the size of the conferences, especially the number of paper presentations, the number and quality of keynote speakers, and the number of attendees.

Suggestions were also made that more local opportunities, such as tours of the city or events related to local companies, be provided.

The SIGITE/RIIT conference organizers appreciate the feedback provided by the attendees of the 2014 conferences and plan to use the comments shared to improve the 2015 conferences.

**Amber Settle**



## UPCOMING CONFERENCES

### **SIGCSE 2015 KANSAS** MARCH 4-7, 2015

SIGCSE 2015 continues our long tradition of bringing together colleagues from around the world to present papers, panels, posters, special sessions, and workshops, (and new this year demos and lightning talks) 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..

### **CSEDU 2015 LISBON, PORTUGAL** MAY 23-25, 2015

CSEDU 2015, the International Conference on Computer Supported Education, aims at becoming a yearly meeting place for presenting and discussing new educational environments, best practices and case studies on innovative technology-based learning strategies, institutional policies on computer supported education including open and distance education, using computers. In particular, the Web is currently a preferred medium for distance learning and the learning practice in this context is usually referred to as e-learning. CSEDU 2014 is expected to give an overview of the state of the art as well as upcoming trends, and to promote discussion about the pedagogical potential of new learning and educational technologies in the academic and corporate world.





# **PREVIEW** **SIGITE/RIIT 2015**





# COMING SOONER THAN YOU THINK SIGITE/RIIT 2015

## SIGITE/RIIT 2015 - De Paul University, Chicago

SIGITE/RIIT 2015 will be hosted by DePaul University and take place in Chicago, Illinois at the DePaul Loop campus September 30 – October 3, 2015. The DePaul Loop campus is located in the heart of Chicago, within walking distance of hundreds of restaurants, bars, and stores, and many attractions including the Art Institute of Chicago and Navy Pier. The conference web site (<http://sigite2015.sigite.org/>) already includes details about attractions and activities and transportation to Chicago, and more information will be posted in the coming months.

The SIGITE/RIIT 2015 conference committee is in place, and they are happy to answer any questions you may have. The conference co-chairs are Amber Settle ([asettle@cdm.depaul.edu](mailto:asettle@cdm.depaul.edu)) and Terry Steinbach ([tsteinbach@cdm.depaul.edu](mailto:tsteinbach@cdm.depaul.edu)), both from DePaul University. The program chair is Deborah Boisvert ([deborah.boisvert@umb.edu](mailto:deborah.boisvert@umb.edu)) from the University of Massachusetts Boston. The sponsorship chair is Steve Zilora ([sjzics@rit.edu](mailto:sjzics@rit.edu)) from Rochester Institute of Technology.

Watch for a call for proposals in the early part of 2015!

**Amber Settle**

**Terry Steinbach**

*Conference Chairs SIGITE/RIIT 2015*





Association for  
Computing Machinery

*Advancing Computing as a Science & Profession*



**SIGITE**