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EDITOR'S
NOTE

Welcome to the new-look *SIGITE Newsletter*. This is the first issue since I agreed to take over the editor's job from Rob Friedman back in October. I would like to publicly thank Rob, who has been the long-time editor for the *SIGITE Newsletter* and its predecessor, *Research in Information Technology*, for the many years of communication service to the SIGITE organization. Now that Rob is the Chair for the organization as a whole, his time of service is still not over. He is however freed from the twice-a-year requirement of publishing this newsletter!

As was discussed in the previous issue, this publication will now be devoted to news and events relevant to our membership. Papers on IT Education are still being actively sought by the editors of the ACM's *Transactions on Computing Education* and ACM's *Inroad Magazine*.

If you have news or stories that you would like to see appear in either of the next two issues of this newsletter in 2013, be sure to contact me at the email listed below.

Randy Connolly
Mount Royal University, Calgary

DR. ROB FRIEDMAN
SIGITE CHAIR
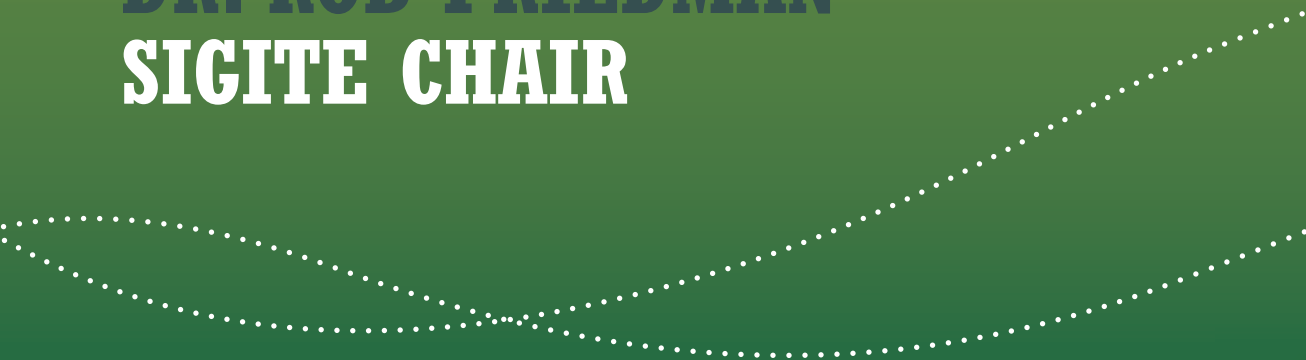
MESSAGE FROM OUR CHAIR

Dear Members

First and foremost, my thanks to Randy Connolly for stepping up to the new role of SIGITE Information Director. Members who've been active over the last few years most likely have worked with, for or around Randy, most recently in Calgary, where he managed to provide snow, sun, reasonable temperatures and access to some of this hemisphere's most beautiful environments, all while orchestrating a very successful conference.

My deep thanks also to the SIGITE community for its confidence in me, Mihaela, Rick and the entire executive committee. We are proud to represent our membership, which we hope to expand in two distinct ways. First, through our outreach to our 2-Yr program partners, and second, to the international community of IT educational programs and industry partners.

As the holiday season throttles up, the SIGITE Executive and Conference committees are debating some changes to the business end of SIGITE/RIIT 2013. At the top of the list is the CMS we've been using for the past seven or eight years, affectionately known as the Grinnell system, given its roots in the home of its developer, Henry Walker. Prof. Walker has been very generous by building in database space on a system he created that helped SIGCSE bloom into the mega success it is today, but previous conference staff have asked, are there alternatives we might explore (different apps for different chaps)? If you have suggestions, please send them my way.

Under review right now by the ACM SIG Board is our request to expand the Executive Committee by adding new regional vice-chairs. If you're living and working in

> **If you're living and working in the northeast, central, southwest or Pacific regions of the US**
>
> or residing on a different continent and would like to serve as a regional representative of SIGITE, we'd like to hear from you !!

the northeast, central, southwest or Pacific regions of the US, or residing on a different continent and would like to serve as a regional representative, we'd like to hear from you.

The calls for papers for both SIGITE 2013 and the second annual Research in IT conference will be coming your way in January. Dave Armitage has been busy selecting and securing the best possible hotel. With any luck, we can finally get the SIGITE golf tournament off the ground this year -- another reason to come up with a few abstracts for these co-located conferences.

Dr. Rob Friedman
University of Washington, Tacoma

SIGITE
ELECTION RESULTS

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 2112
REPORT

SIGITE/RIIT 2112 REPORT

October 10-12, Calgary, Alberta, Canada

Welcome to Canada

This year's SIGITE conference was unique for a number of reasons. The first and most obvious is that the conference moved out of the United States for the first time. Mount Royal University in Calgary was honoured to host the 13th Annual Conference on Information Education and the First Annual Research in IT Conference.

First Annual Research in IT Conference (RIIT)

This year's conference was especially exciting since it introduced the brand new IT Research conference; our aim in this and in future joint SIGITE/RIIT conferences is to provide a venue for showcasing research in information technology along with our traditional focus on teaching IT.

Inspired by the new

research conference, our joint conference had the theme of **Working Together: Research & Education for IT**. Our theme emphasized the increasing synergy between teaching and research in our field. It's a long-standing principle among academics that research should inform our teaching; over years of SIGITE conferences, we've demonstrated the bi-directionality of that relationship, as teaching has often generated the source data and motivation for our research in IT education.

A Strong Motivation for launching RIIT was

the need to recognize "research in IT" as more than a fragmented collection of pursuits in other computing disciplines. We have been watching a body of research develop that is uniquely characteristic of information technology. With a hands-on flavor and stronger connections with industry, it is clearly differentiating itself from research in more traditional computing disciplines, and is deserving of its own conference venue.

STATISTICS
SIGITE/RIIT 2012

Numbers - SIGITE/RIIT 2012 - Calgary

We had a selection of exceptionally strong papers this year.

Making final choices of papers for presentation was anything but easy, and many quality papers could not be included due to the constraints inherent in a conference schedule.

We received a total of 87 paper submissions, 11 poster submissions, and 5 panel submissions.

Of the paper submissions, 18 of were classified as RIIT submissions and the rest (69) as SIGITE submissions. Papers received a minimum of three reviews, with approximately 4.6 reviews per paper being the mean.

A total of 402 reviews were submitted.

We had a shorter than usual review time available for this year's conferences; a large and enthusiastic group of reviewers – 134 of you! – were instrumental in getting the job done. Each reviewer handled from one to eight papers; the mean was approximately three papers per reviewer.

Of the eighteen paper sessions at the dual conference, four of them featured RIIT papers, while fourteen present SIGITE papers. Nine of the forty-nine papers presented represented RIIT submissions. While twenty percent of accepted papers coming from RIIT submissions is a respectable number for the first year of the conference, we look forward to building on that in 2013 and beyond.

GROWTH in SIGITE paper submissions since 2010

197%
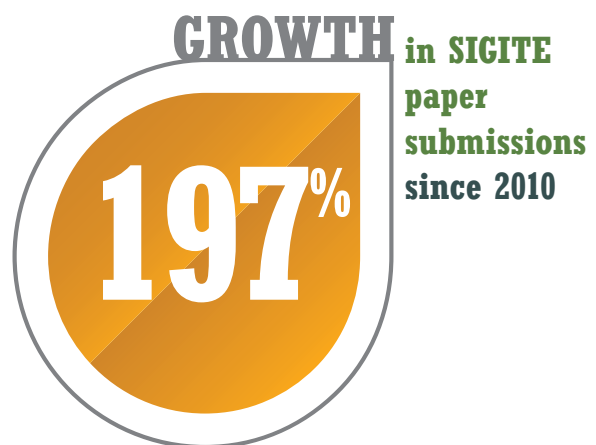
We need to spread the word to our non-IT education colleagues that RIIT is open for business and will be a welcoming venue.

TOP PAPERS
SIGITE/RIIT 2012

Recognition for top papers at SIGITE/RIIT 2012

TOP SIGITE paper

Comparing Achievement of Intended Learning Outcomes in Online Programming Classes with Blended Offerings

By Waleed Farag

In the past decade, there has been a noticeable increase in the number of courses/programs offered online by higher education institutions in US and worldwide. This increase makes it necessary to comprehensively study the effectiveness of these offerings to ensure that they yield comparable outcomes to traditional offerings. This research discusses findings of a multi-year, in-depth qualitative study with the objective of assessing the effectiveness of delivering computer programming courses online and analyzing the quality of this delivery mechanism. Several data sets are used in this study with primarily focus on direct assessments. Specifically, this research measures the Intended Learning Outcomes (ILOs) attained by students enrolled in online programming classes and compares them to the ILOs obtained when teaching the same course in a blended format.

TOP RIIT paper

Improving Accuracy in Face Tracking User Interfaces using Consumer Devices

By Norman Villaroman and Dale Rowe

One form of natural user interaction with a personal computer is based on face pose and location. This is especially helpful for users cannot effectively use common input devices with their hands. A characteristic problem of such an interface, among others, is that face movement is expected to be small and limited relative to a significantly larger control area (e.g. a full resolution monitor). In addition, vision-based algorithms and technologies that enable such interfaces introduce noise that adversely affects usability. This paper describes some of these problems in detail and presents potential solutions. Some basic face tracking user interfaces with different configurations were implemented and statistically evaluated to support the analysis. The different configurations include the use of 2D and depth images (from consumer depth sensors), different input styles, and the use of the Kalman filter.

PAPER HIGHLIGHT

Identifying and Evaluating Information Technology Bachelor's Degree Programs

Andrew Hansen

Brigham Young University

Bikalpa Neupane

Brigham Young University

Barry M. Lunt

Brigham Young University

Richard Ofori

Brigham Young University

This paper describes the process for identifying and evaluating Information Technology (IT) bachelor's programs in the United States, in an effort to answer the question, how many IT bachelor's programs are there in the US? Due to widespread variation in the names of academic degree programs, one cannot simply count those named Information Technology. At SIGITE 2011, a framework was presented for identifying IT programs and for evaluating their compliance to an accepted standard. This framework has been applied throughout this research. We first compiled a list of prospective IT programs to re-search. Each university on the list was researched by looking at their university webpage in search of a list of computing majors listed at that university. If, at a glance, these program's required courses look si-

is calculated using the assessment form that is included in this document. The results of this analysis are presented.

> **What is an Information Technology program? How do we identify IT programs amongs other computing programs?**
>
> Once an IT program is found, how well does it conform to an accepted standard?

milar to those required in an IT program, the program was evaluated and given a numerical score compliance factor, as compared to the standard, no matter the name of the major. This compliance factor

WHAT DO YOU THINK?

Survey Results - SIGITE/RIIT 2012 - Calgary

SIGITE/RIIT 2012 attendees submitted surveys **33**

Planning to attend SIGITE/RIIT 2013 **100%**

Respondants will submit to SIGITE 2013 **75%**

Respondants will submit to RIIT 2013 **40%**

RIIT In its first year accounted for 20% of SIGITE 2012 papers **20%**

Want more concurrent tracks at the conference **75%**

Want more days at the conference **45%**

Regarding that survey you were pestered to submit in Calgary: Thirty-three attendees turned them in, providing valuable planning data. An encouraging sign was that all respondents said they planned to attend SIGITE/RIIT 2013, so that gives us a great base on which to build! A full 75% said they would submit to SIGITE, and 40% to RIIT; an additional 6% and 18% said they might submit to SIGITE and RIIT, respectively.

Last year was RIIT's first year yet it accounted for fully 20% of accepted papers. Given the broader – much broader – range of research that would be applicable to RIIT, we expect this conference to really take off. So one thing we asked in the survey was related to just how we should handle the resulting "bulging at the seams." Here's the verdict: 75% said to have "more concurrent tracks," 45% went for "expand to more days" for the conference, while only 9% chose each of the other alternatives: accept a lower number of SIGITE papers or hold the two conferences separately. **So at this point our plans for the 2013 conference are to go to three concurrent presentation tracks**, versus the two tracks we have had in the past. By itself, that will boost our presentation capacity by 50%. If, in the unlikely event that we do not get enough quality submissions to support a 50% increase, we would either mix in other activities, modify the length of the day, run three tracks sometimes and two tracks other times, or a combination of these.

In our SIGITE/RIIT 2013 advertisement, we asked "Why Not Bring the Family?" So we were interested to know if this idea would fly. The survey told us that one third of you would definitely not bring the family, while 30% said they would and the remaining 36% said "perhaps." So, as a rough estimate, we may see half of our attendees bring their families in 2013, making for a different "mix" than has been typical for our conference. We'll be updating you as the conference gets closer on activities and modifications appropriate to this different mix.

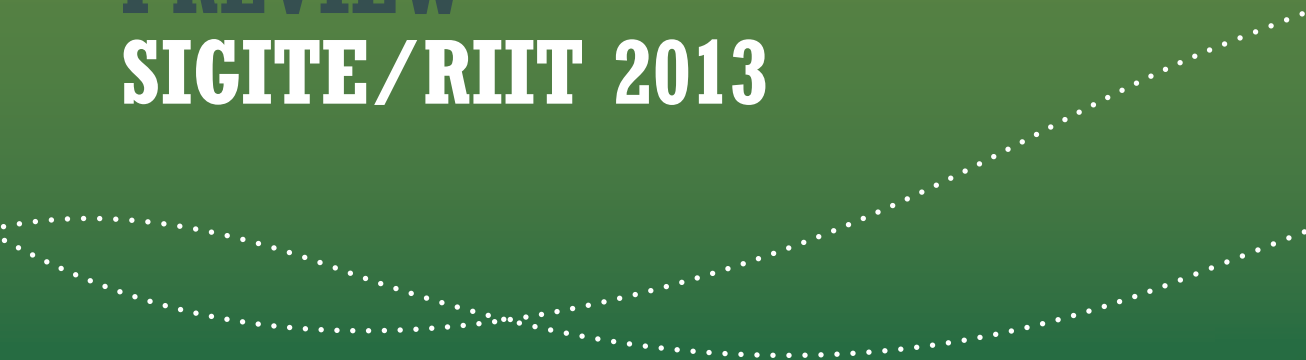**For those of you who provided additional** comments on your survey forms, the conference committee will be considering each of them as we continue our planning. Thanks for your ideas!

Dave Armitage
Program Chair SIGITE/RIIT 2012

PREVIEW
SIGITE/RIIT 2013

COMING SOONER THAN YOU THINK
SIGITE/RIIT 2013

SIGITE/RIIT 2013 - University of South Florida

Here we are in December, 2012
October 2013 seems a long time away,

but important deadlines (like a planned June 1st submission data for papers, panels and posters) will be here before you know it! The Call for Participation may not yet be out, but now is the time to be planning for your submission.

While this is the 14th year for the SIGITE event, it is also the 2nd year for the Research In IT (RIIT) conference. Please get the word out to your IT colleagues who may not be into IT education… but have their own vigorous IT research programs. RIIT is a great place for them to present.

For those of you waiting to learn exactly where in central Florida

(hotel, city… details like that) that SIGITE-RIIT 2013 will be held… you'll have to wait a little longer. We are working with ACM to determine precisely where the conference will touch down. Stay tuned. But while you are waiting, use sunny central Florida to entice your colleagues to participate!

See you in October!

Dave Armitage
Conference Chair SIGITE/RIIT 2013

**Association for
Computing Machinery**

Advancing Computing as a Science & Profession