# ACM SIGITE News

## Information Technology Education

**Association for Computing Machinery Special Interest Group on Information Technology Education**

## SIGITE 2019 Conference Recap

SIGITE 2019 was held in Tacoma, WA, hosted by the University of Washington-Tacoma with Bryan Goda as the conference chair. We enjoyed staying right next to campus – and it's a very beautiful and historic campus! A pre-conference tour included the Pike Place Market, the Space Needle, and the first Starbucks. The conference was one of our best attended ever (155), and included 5 workshops, 21 papers, 20 lightning talks, and 20 poster sessions. We had 3 outstanding keynote speakers, Fernando Maymi, cybersecurity expert, Neil Meldrum, Microsoft Global Business Manager, and John Impagliazzo, a CS professor and ACM heavy hitter for many years and who has also been a great friend to our SIG. It was great to be there, and if you missed it, we missed you!

## A Personal Invite for You to Come to Omaha

We may not always agree on stock picks, but one thing we do agree on is that Omaha is a sure bet. We invite you to experience our city this October. Plan on attending the 21st annual **ACM SIGITE Conference on IT Education** (*Theme: Technology on a Human Scale*) from **October 7th through 9th, 2020** and see for yourself what Omaha has to offer. More information about the conference, detailed CFP (forthcoming), fun things to do in Omaha, and other details are provided on our web site (http://CIST.unomaha.edu/SIGITE2020**).**

These are exciting times in Omaha. We have a booming information technology (IT) sector, an increasing enrollment of CS/IT/IS majors at the University of Nebraska



Omaha (1,270 as of Fall 2019), a rapidly expanding startup culture, growing corporate investment, outstanding industry and education partnerships, not to mention the highest number of public golf courses of any city in the country. For us, Omaha is truly a city that provides the best of what big and small cities have to offer. We hope you join us this in October 2020, and bring your family!

**Your SIGITE 2020 Conference Committee**

Deepak Khazanchi,
    General Chair
George Grispos,
    Program Co-chair
Harvey Siy,
    Program Co-chair
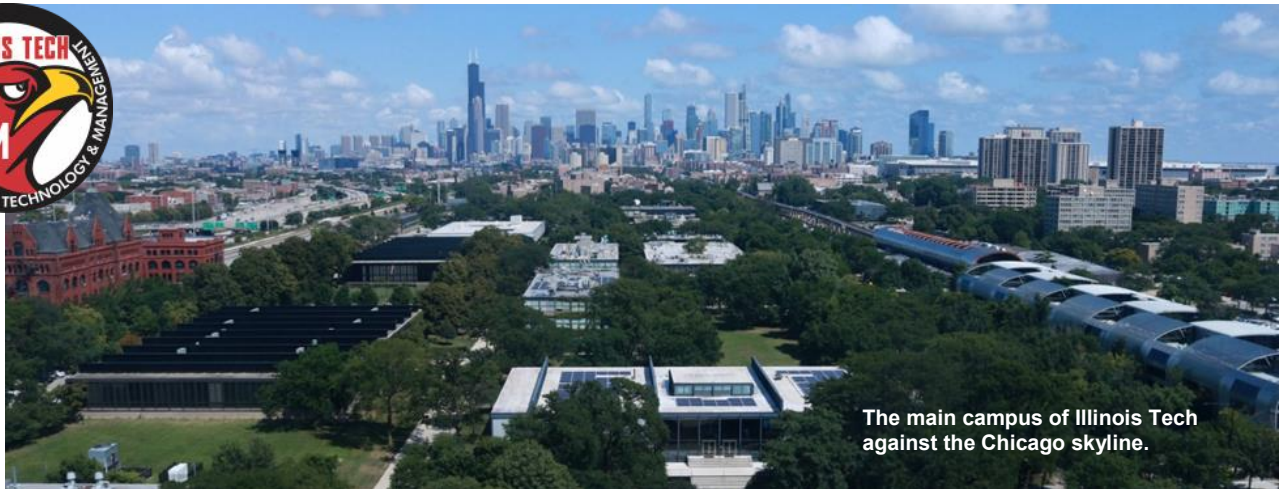
## SIGITE Member Spotlight

This newsletter is pleased to spotlight Mihaela Sabin, a Professor of Computer Science and Chair of the Applied Engineering and Science Department at the University of New Hampshire. She has been a member of SIGITE since 2011, and she hit the ground running. Mihaela has served SIGITE as the Chair of the ACM IT2017 Task Group responsible for the updated Information Technology Curricula 2017 (3 years), and as the SIGITE Vice-Chair from 2012-2015. She presently serves as the appointed Education Chair for SIGITE. Look for her bright smiling face at our next conference – she loves to meet new members and renew acquaintances with old friends!

## IT Program Highlight – Illinois Institute of Technology

**The main campus of Illinois Tech against the Chicago skyline.**

*Illinois Tech faculty members Jeremy Hajek, Ray Trygstad, and Yong Zhang at the IIT sponsor table at SIGITE 2019.*

*Dean and Chair Bob Carlson (white shirt) and Associate Chair Ray Trygstad (red shirt) pose with Department of Information Technology and Management staff, faculty, and new undergrads at our annual New Undergraduate Meet-and-Greet.*

Offering undergraduate and graduate degrees in information technology since 2002, the Department of Information Technology and Management at **Illinois Institute of Technology** is a proud supporter of ACM SIGITE. Our department emphasizes hands-on, project-based education and research. Illinois Tech is a private Ph.D.-granting research university with world-renowned programs in engineering, architecture, the sciences, applied technology, humanities, psychology, business, law, and design. The main campus is located three miles from downtown Chicago with full access to all the business, culinary, cultural, entertainment and recreational activities that one of the nation's top urban centers has to offer.

Our Bachelor of Information Technology & Management

degree is accredited by the Computing Accreditation Commission of ABET, www.abet.org, and Illinois Tech has been designated as a National Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Department of Homeland Security. While nationally renowned for our research in cybersecurity, steganography, recommender systems, and real-time communications, a full range of areas of study in the field of information technology are offered. The ITM Department is currently a community of over 220 undergraduate students, over 240 graduate students, 8 full-time faculty, and numerous visiting and adjunct faculty.

Current degrees offered by Illinois Tech's Department of Information Technology and Management include:

- Bachelor of Information Technology & Management
- Bachelor of Science in Applied Cybersecurity and Information Technology
- Master of Information Technology & Management
- Master of Science in Information Technology and Management
- Master of Cyber Forensics and Security
- Master of Science in Applied Cybersecurity and Digital Forensics

Illinois Institute of Technology's School Applied Technology has been a Platinum Sponsor of ACM SIGITE every year since 2015. The Department of Information Technology and Management is looking forward to hosting SIGITE's 23rd Annual Conference on Information Technology Education in 2022.

## ACM Actions

At the recent meeting of the ACM SIG Governing Board in Chicago, ACM CEO Vicki L. Hanson shared that the ACM is doing quite well financially, as are most of the ACM SIGs. It was a banner year for ACM memberships, more than ever before. The ACM also includes three Regional Councils: China, India and Europe. In one very innovative computing education program, some extremely re-sourceful teachers were teaching computing not only without computers but even without electricity! We hope that makes each of you feel much less re-source-constrained! She also shared two ACM initiatives: a Global Technology Policy Coun-cil; a Future of Computing Academy (pointed toward younger members), and a priori-ty of how the ACM can help practitioners. And BTW, if you need a distinguished speaker for your upcoming special com-puting event, consider one of their Distinguished Speakers and ACM will pay for their transportation to your event! Lastly, remember the highly valuable ACM Digital Library, which has hundreds of thou-sands of great publications re-lated to computing, including the Proceedings of SIGITE 2019!

## SIGITE News

Our SIG is now 15 years old, and we have had our 20th SIG-ITE conference (if you wonder how that can happen, shoot an email to the current SIGITE Chair, and he'll be happy to reply). Financially, we are doing very well, and would love to entertain proposals in the range of $5000-$10,000 that would research a topic of interest to all SIGITE members.

An example of such SIGITE-sponsored research is the recent study completed on 4-year IT programs in the USA. See the results and details on the SIG-ITE website, under IT Disci-pline, then under IT Programs. It gives a compliance score which is based on how closely the program's curriculum aligns with the IT2017 model curricu-lum, referenced earlier.

Please visit it to see how your program stacks up with IT2017, and see the same for other insti-tutions with IT programs. The conference paper based on this research was presented by Bar-ry Lunt and Brady Redfearn at SIGITE 2019 in Tacoma.

*"Financially, we are doing very well, and would love to entertain grant proposals…"*

## Job Postings

**Georgia Gwinnett College** (GGC) invites applicants for a Lecturer faculty position in Information Technology start-ing August 1, 2020.

GGC is one of 28 institutions within the University System of Georgia. GGC is a premier 21st century liberal arts institution accredited by the Southern As-sociation of Colleges and Schools Commission on Colleg-es. Serving nearly 13,000 stu-dents, GGC's innovative prac-tices, caring culture, and ex-tremely affordable tuition are changing the game in higher education and changing the future for students at all levels, of all ages, and from all walks of life. Gwinnett County (pop. 920,000+) is home to a variety of businesses, including organi-zations involved in health care, education and information tech-nology.

Lecturers are evaluated primar-ily upon teaching and student engagement with consideration given to service and collegiality. Lecturers are not expected to participate in scholarly activi-ties. Successful candidates will be expected to contribute to the design and delivery of courses in the Information Technology major. Currently we offer ma-jors with tracks in Enterprise Systems, Digital Media, Soft-ware Development, Systems and Security and Data Science and Analytics. Successful candi-dates will have a strong com-mitment to undergraduate edu-cation, student engagement and service to the college and com-munity. GGC is an institution that values innovative teaching, advising and mentoring (advising and mentoring is ex-pected of all faculty). Other related duties as assigned.

In accordance with Board of Regents Policy govern-ing GGC faculty, successful applicants will be eligible to receive three or five year renew-able appointments or one year traditional appointments may also be approved. For more information about our college, please visit our website at www.ggc.edu.

For more details and to apply, please see: https://jobs.ggc.edu/job-details?jobID=33313&job=information-technology-lecturer-fall-2020

**Utah Valley University** (UVU in Orem, UT) is hiring for 2 tenure-track IT faculty posi-tions. Details can be found at: https://www.uvu.jobs/postings/12477

The Department of Information Technology at **Kennesaw State University** has 3 tenure-track positions available start-ing August 1st, 2020. Detailed position information can be found in the following link: https://facultyjobs.kennesaw.edu/postings/6813

The School of Information Tech-nology at the **University of Cincinnati** is seeking to hire two Assistant Professor - Ten-ure Track positions. For infor-mation and to apply, go to https://jobs.uc.edu and enter the requisition number 39606.

**The University of Kansas** Asst/Assoc/Full Professor of the Practice - Information Technology Electrical Engr & Comp Science School of Engineering http://www.employment.ku.edu/academic/16029BR

# Information Technology Education

**Association for Computing Machinery
Special Interest Group on Information
Technology Education**

## 2019-2020 SIGITE Executive Committee

*Chair:*
　Barry Lunt, Brigham Young University
*Vice Chair:*
　Ray Trygstad, Illinois Institute of Technology
*Treasurer/Secretary:*
　Karen Patten, University of South Carolina
*Communications Director:*
　Mabio Neto, Andrews University
*Vice Chair for Education:*
　Mihaela Sabin, University of New Hampshire
*Past Chair:*
　Steve Zilora, Rochester Institute of Technology
*Regional Representatives::*
　David Kerven, Georgia Gwinnett College
　Laurie Patterson, University of North Carolina
　　Wilmington
　Diana Wang, George Mason University

## We're on the Web!
## http://sigite.org

*ACM-SIGITE is the Association for Computing Machinery (ACM) Special Interest Group on IT Education. Our members include information technology faculty (teachers and researchers), students, and industry professionals.*

*ACM is the world's largest educational and scientific computing society; it delivers resources that advance computing as a science and a profession.*

*SIGITE drives the creation and dissemination of the computing discipline of information technology. The organization has created a model undergraduate curriculum and helped create accreditation guidelines for IT programs, and is now defining and promoting IT research.*

*The academic discipline of IT is quite new but is now recognized by ACM as well as IEEE as a peer in the menu of computing disciplines along side computer science (CS), information systems (IS), and computer engineering (CE).*

*The SIG's mission is thus twofold:*

1. *To be a venue for the discussion and dissemination of IT education.*

2. *To articulate, promote, and dissemination of research related to IT.*

## Accreditation Update

As of this writing, there are 39 IT programs accredited as IT programs by the Computing Accreditation Commission of ABET. This is the most ever, and it reflects strong interest in the standards set by ABET. The standards have been updated, and accreditation remains a worthy endeavor for all IT programs. A recently published draft update will bring the ABET IT Curriculum Criterion in line with the 2017 IT Model Curriculum.

## Curriculum Update

Several of our SIGITE members were involved in the most recent version of the IT model curriculum, IT2017, referenced above. Mihaela Sabin was the Chair of the committee; other SIGITE members included Barry Lunt and Bill Paterson. The result is a very useful and well-written document which includes diagrams, tables, and program examples. We hope all IT programs will become aware of this document and use it to help guide future curriculum decisions.

## The founding of SIGITE: Some History

Information Technology is among the newest recognized computer disciplines. The explosion of the Internet and the world-wide web, beginning in about 1992 with the advent of web browsers such as Mosaic and Navigator, created a rapidly growing community of online computer users who needed to access information of all sorts from their own computers. This dramatic growth in personal and corporate use of the Internet, along with web systems, databases, and networking, gave rise to information technology (IT) programs that specifically teach these topics.

***Core Pillars:*** As with the other computing disciplines, IT programs arose from various backgrounds at their institutions. Some, such as that at BYU, emerged from electronics programs. Others, such as the one at Georgia Southern, emerged from a technically-oriented IS background. The most common parent of all was CS. Each program retains some flavor of its origins, while adhering to the core pillars of the IT curriculum: networks, web systems, programming, databases, and human-computer interaction, all within the context of information security.

***Meeting of the Minds:*** In December 2001, 16 of these IT programs met together near the Sundance ski resort in Utah. Hosted by BYU and RIT, this small conference was aimed at promoting a national presence for the emerging IT academic discipline. At this conference, 3 committees were formed: curriculum, accreditation, and professional society. Each of these committees produced results over the following years.

***Model Curriculum:*** By 2005, the curriculum committee had a draft IT model curriculum completed and submitted to the joint Computing Curricula project of the ACM, IEEE and the AIS. A final version of the model curriculum was completed in 2008. The curriculum had a sweeping update in 2017 with our members at the forefront, and can be found on the SIGITE website.

Also in 2005, the accreditation committee had produced a draft IT-specific accreditation criteria for CAC of ABET, and the first 'pilot' program had been accredited using these criteria. Since that time, 39 programs have been accredited under these criteria.

The third committee, professional society, was also very active. Following the first meeting in Utah, the committee sponsored conferences annually (two in 2003), under the name Society for Information Technology Education (SITE). These conferences grew to include quality peer-reviewed papers. In the summer of 2003, SITE joined with ACM to become the ACM Special-Interest Group for Information Technology Education (SIGITE). SIGITE conferences continue to be among the most important gatherings for IT educators.