



Scalable Advanced Learning Ecosystems **SUMMIT**

Nov 29-30, 2018

Georgia Institute of Technology
Atlanta, GA





Welcome to Georgia Tech's Scalable Advanced Learning Ecosystems (SALE) Summit!

This summit is funded by a generous grant from the **National Science Foundation** (NSF) and hosted by Georgia Tech's **Center for 21st Century Universities** (C21U) and **Georgia Tech Professional Education** (GTPE).

Visit **c21u.gatech.edu** to find out more about C21U – Georgia Tech's living laboratory for fundamental change in higher education. You can also follow our work on Twitter - **@C21U**.

Visit **pe.gatech.edu** to find out more about innovative learner opportunities and programs offered by Georgia Tech's global campus and lifetime education arm. Find Georgia Tech Professional Education on LinkedIn at **[linkedin.com/company/georgia-tech-professional-education](https://www.linkedin.com/company/georgia-tech-professional-education)**.



Scalable Advanced Learning Ecosystems Summit 2018 Agenda

Day 1 - Thursday, November 29, 2018

8:00 AM	Breakfast and On-site Registration
8:30 AM Room 225	Welcome and Introductory Remarks Rob Kadel and Rich DeMillo, Center for 21 st Century Universities, Georgia Tech
9:15 AM Room 225	Opening Plenary “Cognitive Assistants as Coaches for Experience-based Learning” Chris Dede, Harvard University Introduction by Ashok Goel, College of Computing, Georgia Tech
10:00 AM	Break and Regroup in Working Groups
10:15 AM	Working Group Breakout Session 1 <ul style="list-style-type: none"> • Research, Insights, and Assessments, Including Promoting Quality Teaching – Room 152 • Business Models – Room 317 • Technical Infrastructure – Room 318 • Immersive Learning – Room 319 • AI, Personalization, and Intelligent Tutoring – Room 330 <p>Each group should work from questions provided prior to the event and should also spend this first session identifying any additional questions that need to be addressed.</p>
11:30 AM Room 225	Whole-Group Report Each working group will have five minutes to describe additional questions identified for consideration and to raise any issues identified in their opening session, e.g., input they will need from another group in order to answer their questions.
12:15 PM Atrium	Lunch and Work Break
1:30 PM	Working Group Breakout Session 2 Same room assignments as above
3:30 PM	Break

3:45 PM Room 225	Afternoon Plenary “Use of Museum Digital Resources in K-12 Pedagogy” Stephanie Norby, Smithsonian Institution Introduction by Lindsay Kelly, College of Computing, Georgia Tech
4:30 PM Room 225	Whole-Group Report on Day 1 Activity
5:00 PM Atrium	Reception with Remarks from Rafael Bras, Provost, Georgia Tech
6:00 PM	Adjourn, dinner on your own

Day 2 - Friday, November 30, 2018

8:00 AM	Breakfast
8:30 AM Room 225	Opening Remarks for Day 2 “All Points Considered?” Nelson Baker, Georgia Tech Professional Education
8:45 AM Room 225	Plenary Presentations “Tools and Strategies for Collaboration” Gisele Larose, WebStudy Foundation “Tools and Strategies for Interoperability” Cary Brown, IMS Global Introduction by Steve Harmon, Center for 21 st Century Universities, Georgia Tech Professional Education, and College of Design, Georgia Tech
9:45 AM	Working Group Breakout Session 3 Same room assignments as Thursday. Each working group should prepare 5 minutes of information on their answers to the questions they have addressed.
10:30 AM	Break
10:45 AM Room 225	Whole-Group Report on Outcomes and Q&A
11:45	Transition Break
Noon Room 334-335	Lunch Closing Plenary “Beyond Access: Using Adaptive Courseware to Improve Success in Foundation Classrooms” Karen Vignare, Association of Public & Land-Grant Universities Introduction by Yakut Gazi, Georgia Tech Professional Education Closing Remarks Ashok Goel, College of Computing, Georgia Tech
1:30 PM	Adjourn and Depart

Speaker Bios

Nelson Baker

Nelson C. Baker, Ph.D., is the Dean of Professional Education at the Georgia Institute of Technology and Associate Professor in the university's School of Civil and Environmental Engineering. As dean, Dr. Baker leads a multifaceted operation including the Global Learning Center, Georgia Tech-Savannah, the Language Institute, and Georgia Tech's extensive professional education programs in STEM- and business-related subjects. Dr. Baker also oversees educational outreach programs and serves as the interface between Georgia Tech's professional education activities and the industries, corporations, government agencies and professional societies that benefit from them.

Under Dr. Baker's leadership, Georgia Tech Professional Education has steadily expanded, now reaching more than 36,000 learners and 2,600 organizations each year. Dr. Baker's award-winning work on the impact of technology on engineering students' learning has generated projects such as multilingual web-based intelligent simulations for problem solving, among others. Leading Dr. Baker's list of honors is the W.M. Keck Foundation Award for Engineering Teaching Excellence. He has been named an ENR Educator for Construction's Next Generation as well as an NSF National Young Investigator. He is also the recipient of the Best Paper Award from the ASCE Journal of Computing. Within Georgia Tech, he has received the Outstanding Innovative Use of Education Technology Award and the W. Roane Beard Outstanding Teacher Award. Currently, Dr. Baker serves as the Secretary General of the International Association of Continuing Engineering Education (IACEE) and also serves as the President-Elect for the University Professional Continuing Education Association (UPCEA). He is the Past-Chair of the Georgia Board of Regents Administrative Committee on Public Service and Continuing Education, and he is an active member of ASEE and ASCE.

Rafael L. Bras

Rafael L. Bras is the provost and executive vice president for academic affairs at the Georgia Institute of Technology. Bras is a professor and the K. Harrison Brown Family Chair in the School of Civil and Environmental Engineering and the School of Earth and Atmospheric Sciences. Bras was distinguished professor and dean of the School of Engineering at the University of California, Irvine. For 32 years prior, he was a professor at the Massachusetts Institute of Technology where he was Institute faculty chair, head of the Civil and Environmental Engineering department, and director of the Ralph M. Parsons Laboratory. He has served as advisor to the National Science Foundation, the National Research Council and the NASA Advisory Committee, among others.

He is a member of the National Academy of Engineering and the Academy of Arts and Sciences of Puerto Rico. His awards include the Hispanic Engineer National Achievement Award Hall of Fame, AGU Horton Medal, NASA Public Service Medal, and the Clarke Prize, among others. He

chaired a panel that supervised the design and construction of a multibillion-dollar project to protect the city of Venice from floods. He has published two textbooks, more than 225 journal publications, and several hundred other publications.

Cary Brown

Cary Brown began his tech career designing applications on relational databases before transitioning to edtech as a functional analyst with Peoplesoft Campus Solution. Brown worked as a development manager and strategist with Oracle's Higher Education solutions for 20 years with responsibilities focusing on integration and extending and enabling the entire academic ecosystem in a sustainable, standards-based way, culminating in overseeing the Campus Solutions product suite. He recently joined IMS Global Learning Consortium as Director of Higher Education Programs. When he's not geeking out on education technology, Brown is a writer and filmmaker.

Chris Dede

Chris Dede is the Timothy E. Wirth Professor in Learning Technologies at Harvard's Graduate School of Education. His fields of scholarship include emerging technologies, policy, and leadership. In 2007, he was honored by Harvard University as an outstanding teacher, and in 2011 he was named a Fellow of the American Educational Research Association. From 2014-2015, he was a Visiting Expert at the National Science Foundation Directorate of Education and Human Resources. His edited books include: *Scaling Up Success: Lessons Learned from Technology-based Educational Improvement*, *Digital Teaching Platforms: Customizing Classroom Learning for Each Student*, *Teacher Learning in the Digital Age: Online Professional Development in STEM Education*, *Virtual, Augmented, and Mixed Realities in Education*, and *Education at Scale: Engineering Online Learning and Teaching*.

Richard A. DeMillo

Richard DeMillo is the Charlotte B. and Roger C. Warren Professor of Computing and Professor of Management, former John P. Imlay Dean of Computing, and Executive Director of the Center for 21st Century Universities at the Georgia Institute of Technology. Author of over 100 articles, books, and patents, he has held academic positions at Purdue University, the University of Wisconsin, and the University of Padua. He directed the Computer and Computation Research Division of the National Science Foundation and was Hewlett-Packard's first Chief Technology Officer.

He is the 2013 Lumina Foundation Inaugural Fellow, which recognized his founding of the Center for 21st Century Universities as a "unique institution." He is also a Fellow of both the American Association for the Advancement of Science and the Association for Computing Machinery. He is the author of the influential 2011 book "Abelard to Apple: The Fate of American Colleges and Universities" and an award-winning 2015 sequel, "Revolution in

Higher Education: How a Small Band of Innovators will Make College Accessible and Affordable.” MIT Press published both of DeMillo’s books.

Yakut Gazi

Yakut Gazi is the Associate Dean for Learning Systems at Georgia Tech Professional Education, overseeing learning design and development, technology infrastructure, compliance, and assessment. She has worked at higher education institutions in the United States, Qatar, Turkey, and Spain since 1993. Prior to joining Georgia Tech Professional Education, she was the assistant vice chancellor for engineering remote education at Texas A&M University. Gazi also led the distributed learning and classroom technology operations at Texas A&M University-Central Texas. In addition to these roles, she has taught courses in educational technology, foundations of distance learning, psychology of learning, theories of learning, and predictive analytics in higher education. She is on the editorial review board of the Journal of Social Media in Society, Educational Technology, Research, and Development (ETR&D), and the MERLOT Journal of Online Learning and Teaching. Gazi serves on the Academic Advisory Board and International Advisory Board for Quality Matters(c) and as a board member of the International Association for Continuing Engineering Education (IACEE). She has her Ph.D. in Educational Psychology from Texas A&M University, and an M.A. in Educational Sciences and a B.S. in Teaching Chemistry, both from Bogazici University in Turkey.

Ashok Goel

Ashok Goel is a Professor of Computer Science and the Director of the Ph.D. Program in Human-Centered Computing in the School of Interactive Computing at Georgia Institute of Technology. He conducts research into cognitive science and artificial intelligence with a focus on computational design and creativity. He is a Co-Chair of the 41st Annual Meeting of the Cognitive Science Society and the Editor of AAAI’s AI Magazine. As part of Georgia Tech’s online Masters of Science in Computer Science (OMSCS) program, Ashok developed a graduate-level course on AI, and as part of this class, he developed “Jill” Watson, an AI teaching assistant for answering questions in the class discussion forum. He is a co-editor of a volume on “Blended Learning in Practice: A Guide for Practitioners and Researchers” to be published by MIT Press in 2019.

Stephen Harmon

Stephen Harmon serves as Associate Dean of Research at Georgia Tech Professional Education (GTPE), Associate Director of the Center for 21st Century Universities (C21U), and as a professor at the Georgia Tech College of Design. At GTPE and C21U, he leads the invention, prototyping, and validation efforts associated with educational innovation and research in learning design and technology. His previous position was professor and chair of the Learning Technologies Division in the College of Education and Human Development at Georgia State University. After majoring in English literature at Furman University, Dr. Harmon moved to Upper Egypt to teach fourth-grade English for two years. While traveling through the Middle

East and Africa, he realized the tremendous need, and scarce resources, for education and training in developing countries. He returned to the U.S. and earned a masters and doctorate in instructional technology, with a cognate in global policy studies, from the University of Georgia.

Harmon's research centers on educational uses of emerging technologies and has, for the last few years, focused on transforming higher education to better meet the needs of modern students and society. He is a past president of the Association of Educational Communications and Technology, an international professional association of thousands of educators and others whose activities are directed toward improving instruction through technology. Harmon also conducts research on educational technology in developing countries. He has worked in several Middle Eastern and African countries, including as a consultant for USAID's Education for Development and Democracy Initiative in Botswana.

Harmon has over 120 professional publications and presentations, has given over a dozen invited keynote addresses internationally, and was the 2011 recipient of Georgia State University's Innovative Instruction Award. He was the spring 2016 commencement speaker at Georgia Southern University. He is a fellow of the Emerging Leaders Program at Georgia Tech.

Rob Kadel

Rob Kadel is Assistant Director for Research in Education Innovation with the Center for 21st Century Universities at Georgia Tech. His research spans nearly 20 years, including work evaluating the effectiveness of learning technologies at both the K-12 and higher education levels. Rob brings to C21U research foci in online pedagogy and effective practices, blended learning, learning analytics, and tools/strategies to help close the digital divide for economically disadvantaged students. He has presented both nationally and internationally on cutting-edge learning technologies and managing grants, programs, and research in their use. Rob held faculty positions at Penn State University and Johns Hopkins University prior to running his own educational technology research-consulting firm for seven years. He continues to teach online courses in the sociology of education, criminology, and juvenile delinquency for the University of Colorado Denver. Rob earned his Ph.D. in sociology from Emory University in 1998.

Lindsay Kelly

Lindsay Kelly is a master's student at Georgia Tech studying Human-Computer Interaction, as well as a Graduate Research and Design Assistant at Georgia Tech's Center for 21st Century Universities (C21U). Her work at C21U focuses on researching and designing solutions to improve faculty educational technology adoption, as well as supporting the digitization of academic credentials via a C21U-powered Blockcerts application. Prior to graduate school, Lindsay was a Manager at Accenture, where she advised international higher education

providers throughout systems implementations and operating model changes. Her work at Accenture involved spearheading virtual reality educational products, enhancing the student experience throughout a global rollout of Banner, as well as various change management initiatives. After graduation Lindsay will work as a User Experience Researcher at LinkedIn, where she aspires to work on LinkedIn's learning products.

Gisele Larose

Gisele Larose is the executive director of The WebStudy Foundation, a 501(c)(3) non-profit organization dedicated to facilitating collaboration among cross-functional college and university departments. The Foundation's mission is to enable collaborative decision-making focused on student success, innovation and growth. After a long career in healthcare as both a clinician and an executive for a Fortune 500 rehab provider, Gisele partnered with her husband (IT) to pursue investment opportunities in education that were philanthropic in nature and poised to impact change. Recognizing the similarities between education's current transformative journey into the digital era in contrast to healthcare's transformation from a secondary to a third-party reimbursement system. A New Path Forward was launched to include the WebStudy Foundation.

Stephanie Norby

Stephanie Norby, Director of the Smithsonian Center for Learning and Digital Access (SCLDA), oversees Institution-wide educational initiatives and programs including publications, events, digital interactives, websites and online conferences. Her office has produced the Smithsonian Learning Lab (<https://learninglab.si.edu/>), a free, interactive platform for discovering millions of authentic digital resources, creating content with online tools, and sharing in the Smithsonian's expansive community of knowledge and learning.

Norby has partnered on national education programs with Pearson Foundation, the Massachusetts Institute of Technology, Microsoft Partners in Learning, Lenovo, Council of Chief State School Officers, and the Boys and Girls Club of America.

Karen Vignare

Dr. Karen Vignare is a strategic innovator who has been leveraging emerging technologies to improve access, success and flexibility within higher education for over 20 years. Vignare currently serves as the Executive Director of the Personalized Learning Consortium (PLC) at the Association of Public and Land Grant Universities. The PLC's mission is to support public universities as they rapidly infuse technology that supports improved student learning, retention and graduation. The PLC fosters multi-institutional cooperation and collaboration that advances the use of digital learning, adaptive courseware, and advising reforms to improve student access and success especially for underserved student populations. Vignare leads the adoption of adaptive courseware into early college courses to improve pedagogy and student success. The adaptive courseware project is focused on scaling



across introductory courses to leverage technology that allows faculty to then change pedagogy in classroom as needed.

Vignare has been faculty, staff and an administrator at four different institutions during her career in higher education providing her with insight from several institutional viewpoints. She has published extensively on online learning, adaptive learning, student success, analytics, and open educational resources. She has a Ph.D. from Nova Southeastern University in Computer Technology and Education and a M.B.A from the William Simon Business School at University of Rochester.

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