Message from the Symposium and Program Chairs

Welcome to the proceedings of the 41st ACM Technical Symposium on Computer Science Education, or SIGCSE 2010. Contained within you will find the archival record of over one hundred papers as well as multiple other session formats that change Computer Science education by bringing together researchers, educators, students, tool creators, textbook authors and publishers, and the many other groups that improve learning in our field. SIGCSE 2010 celebrates and encourages the connections we make as we discuss the challenges and excitement of computer science education, which is why this is SIGCSE’s thematic year for “Making Contact”. We hope the theme also applies as we all return to our everyday activities: maintain contact with the community you create at SIGCSE and make contact with the students whose learning is the heart and end goal of our efforts!

We are pleased to announce the winners of the two annual SIGCSE awards. Sally Fincher of the University of Kent will receive the SIGCSE award for Outstanding Contribution to CS Education, and will provide the opening keynote. Distinguished Professor Peter Denning of the Naval Postgraduate School, Monterey will accept the SIGCSE Award for Lifetime Service to the CS Education Community and speak at our First Timer’s Lunch. In addition, we’ve invited two keynote speakers to discuss the future of pedagogy and technology: Carl E. Wieman—Director of the Carl Wieman Science Education Initiative and Professor of Physics at the University of British Columbia and Director of the Science Education Initiative and Distinguished Professor of Physics at the University of Colorado at Boulder—will give Friday’s address on “Science Education for the 21st Century: Using the Insights of Science to Teach/Learn Science.” Michael Wrinn—Manager of Innovative Software Education at Intel Corporation—will address Saturday’s concluding luncheon on “Suddenly, All Computing Is Parallel: Seizing Opportunity Amid the Clamor.”

Symposium statistics are presented below. Many thanks to the authors, reviewers, and Program Committee members whose enormous and vital service generated this program! Special thanks to Tzu-Yi Chen, Birds-of-a-Feather Chair, for creating the new round of “Lightning” BoFs to address compelling, late-breaking topics at the Symposium!

This year’s program includes the usual wide selection of events, including the First-Timer’s Lunch and Evening Reception on Thursday and the SIGCSE luncheon on Saturday. We have an immense exhibit hall with even more exhibits than last year! On Wednesday, we have a range of pre-symposium events. We are particularly excited to welcome the AccessComputing Alliance’s Deaf and Hard of Hearing Community of Practice to SIGCSE and, with their leadership, to increase accessibility at SIGCSE 2010 for the deaf and hard of hearing. We are also excited about our other pre-symposium (and one post-symposium!) events on AlgoViz, Cloud Computing by Microsoft, Commonsense Computing, the CSTA Source Web Repository, Department Chairs’ Issues, Humanitarian Free and Open Source Software, Introducing Computing with Personal Robots, Media Computation, New Educators’ Issues, Qualitative Research Methods, and the Software Engineering Disciplinary Commons. During Friday lunch, the UPE will present their annual Abacus Award, with a speech...
by the awardee. On Saturday, top undergraduate and graduate students will present their work at the ACM SIGCSE Student Research Competition, managed by Ann Sobel.


In difficult economic times, we extend a very grateful thank you to our supporters, vendors, and exhibitors whose participation literally made the symposium possible. Special thanks go to our Supporter/Exhibitor Liaison Susan Rodger (who crafted her own onerous volunteer position) and Dorothea Heck of D. Lawrence Planners for coordinating this massive endeavor.

We reserve a huge thank you for our amazing Platinum Plus supporter, Microsoft!

We also especially thank our Platinum supporters Intel and Google!

Finally, we welcome IBM this year as a Gold supporter!

We received support and guidance from SIGCSE Symposium Site Coordinators Bob Beck and Scott Grissom, SIGCSE President Barbara Boucher Owens, and the entire SIGCSE Board, as well as from Brooke Hardy and Ashley Cozzi of ACM. The City of Milwaukee gave us help at every turn through their excellent Convention and Visitor’s Bureau, especially Robert Moore and Kim Brunzelle. We were supported at the Midwest Airlines Center by Shannon Harring and Samantha Catena, at the Hyatt by Aaron Kraemer, and at the Hilton by Gregory Roettgers and Bill Bull.

Special thanks to our home institutions for providing needed resources: the University of British Columbia, Xavier University, Carnegie Mellon University, and Hiram College. We genuinely hope you enjoy the Symposium and find these Proceedings of use for your work now and your future projects and activities.

Symposium Chairs
Gary Lewandowski, Xavier University
Steven Wolfman, University of British Columbia

Program Chairs
Ellen L. Walker, Hiram College
Thomas J. Cortina, Carnegie Mellon University