

Report on the First ACM Global Computing Education Conference (CompEd)

By Ming Zhang, General Co-chair; Stephen Cooper and Andrew Luxton-Reilly, Program Co-chairs

SIGCSE successfully held the first ACM Global Computing Education Conference (CompEd) May 17-19, 2019, in Chengdu, China. Details are available at the conference web site, <https://www.acmcomped.org/>. At the intersection of computing and the learning sciences, CompEd seeks to promote *global* computing education development. Moving forward, the conference will be held every other year in different locations around the world, but not in North America or Europe where SIGCSE already has annual conferences.

The first CompEd was co-located with two conferences, the ACM Turing Celebration Conference - China (ACM TURC) and SIGCSE China. Additionally, ACM-W ran a co-located workshop, as did the Computing Curriculum 2020 (CC2020) group.



ACM-W workshop led by Catherine Lang from La Trobe University, Australia

photo credit: Ming Zhang

CompEd had 99 conference attendees who had registered directly for CompEd, with an additional 55 attendees who registered for both CompEd and ACM TURC 2019. CompEd attendees were invited to attend the ACM TURC morning keynote sessions and the

SIGCSE China Symposium afternoon sessions, and several TURC attendees joined CompEd sessions. This facilitated the exchange of ideas and information between Computing Education researchers and CS researchers from other fields.

Amber Settle, the ACM SIGCSE Chair, together with Stephen Cooper and Andrew Luxton-Reilly, CompEd Program Co-chairs, delivered the opening remarks. Paul Denny from the University of Auckland, New Zealand gave a well-received keynote speech entitled “Four Million Questions and a Few Answers: Lessons from Research on Student-Generated Resources.”



Paul Denny delivering the keynote speech
photo credit: Ke Zhang

Submission types of this years CompEd included paper sessions, panels, working groups, birds-of-a-feather sessions, and posters. The conference received 100 papers, 3 panels, 8 working group applications, 4 birds-of-a-feather sessions, and 10 posters. In total, more than 320 authors from 25 countries submitted work for review. From these submissions, 33 full papers (33%), 1 panel (33%), 3 working groups (38%), 2 birds-of-a-feather sessions (50%), and 8 posters (80%) were accepted.

Following in the tradition of ITiCSE, CompEd included working groups that bring together researchers from across the global Computing Education community to work on substantive

research projects. Three working groups, focusing on the areas of online judging systems, peer instruction, and teaching of computing ethics were supported by CompEd.

The award for the best paper went to Ilenia Fronza, Arto Hellas, Petri Ihantola, and Tommi Mikkonen, for their paper, “An Exploration of Cognitive Switching in Writing Code.” The chairs’ award for the best paper where a student is the lead author, went to Sadia Sharmin, Daniel Zingaro, Lisa Zhang, and Clare Brett, for their paper, “Impact of Open-Ended Assignments on Student Self-Efficacy in CS1.” All of the CompEd papers are available in the ACM Digital Library.



Sadia Shamin (middle), Program Co-chairs Stephen Cooper (left) and Andrew Luxton-Reilly (right) photo credit: Juan Chen

One of SIGCSE’s desires is to connect local computing education researchers with the larger SIGCSE community. Fortunately, through the efforts of the ACM China SIGCSE chapter, many Chinese researchers submitted papers to CompEd, and 6 papers from Chinese universities - National University of Defense Technology China, Peking University, Xi'an Jiaotong University, Xidian University, Southeast University and Jiangnan University - were accepted to be presented. During the poster session, Computing Education researchers from Shanghai Jiaotong University, Jiangnan University, Shanghai AchieveFun Info. Co., and the University of Chinese

Academy of Sciences (UCAS) presented their recent research results. Attendees and presenters engaged in lively discussions during the poster session.

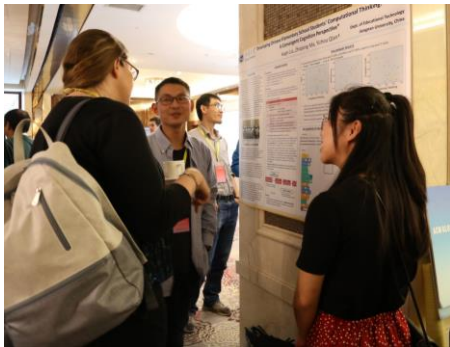


photo credit: Cole Rodger Photographics

Through the three days of presentations and reports from researchers around the world, CompEd 2019 successfully established a world-wide platform for researchers to communicate and exchange new ideas on computing education. Participants from a wide variety of countries were able to experience the great changes in Chinese computing education in recent years and appreciate the growing impact of China in global Computing Education.



CompEd 2019 committee and participants

photo credit: Xi Wu

CompEd attendees had the opportunity to visit a panda research center, and see several dozen pandas, including a mom and her two babies.



Excursion to Chengdu Research Base of Giant Panda Breeding

photo credit: Cole Rodger Photographics

One last spectacular feature of CompEd 2019 was the food. Sichuan province (of which Chengdu is the capital) is known for its food, and it lived up to the reputation for delicious (and spicy) fare.



A typical dinner in Chengdu

photo credit: Andrew Luxton-Reilly

CompEd organizers acknowledge generous support from sponsors GitHub, Google, and ByteDance, and thank Cole Rodger, professional photographer (coleimage.com), whose photos will appear on the conference website.

We're all looking forward to CompEd 2021, likely to be held in India.