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Paper & slides available at: brettbecker.com/publications
Geographic Diversity at the SIGCSE Technical Symposium

• Common Knowledge: The SIGCSE Technical Symposium is very US-centric

• We sought to determine how much and in what ways specifically, and in the context of ACM, SIGCSE as an organization, & other conferences (SIGCSE & outside SIGCSE)

• We gathered and analysed ACM & SIGCSE membership as well as Symposium attendance, publication, & authorship data for the last decade

• We also offer suggestions that may help improve geographic diversity at the Symposium

• Besides being SIGCSE members, and wearing some other hats, we are:
  • Brett: Global Liaison to the SIGCSE Symposium & Chair of Ireland ACM SIGCSE Chapter
  • Amber: SIGCSE Board member (Immediate Past-chair)
  • Andrew: SIGCSE Board member (Treasurer) & Chair of Australasian ACM SIGCSE Chapter
  • Briana: Former Board member (At Large) & SIGCSE Historian
  • Cary: SIGCSE Symposium Registrar (a few times :)
SIGCSE

• The Special Interest Group (SIG) for Computer Science Education (SIGCSE) is one of the oldest and largest Association for Computing Machinery (ACM) SIGs
• Nearly 3000 members from more than 100 countries
• It sponsors four conferences:
  • The SIGCSE Technical Symposium: largest & oldest – 52 yrs ~1800 attendance
  • The Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE): 26 yrs ~300 attendance
  • The Annual ACM International Computing Education Research Conference (ICER): 16 yrs ~200 attendance
  • The ACM Global Computing Education Conference (CompEd): 1 yr ~150 attendance
• The SIGCSE Symposium is especially important because of its size, scope, duration, & unique activities
Membership

ACM membership
~75,000 professional members

- 54% North American (49% U.S.)
- 24% Asian
- 17% European
- 2% South American
- 2% Oceania
- 1% Africa
- 0% Antarctic (est.)

SIGCSE membership
U.S. dominates SIGCSE membership (~80%)
Symposium attendance 2010 – 2019

- North America 95%
- U.S. 93%
- Europe <3%
- Asia <2%
- Australasia <1%
- South America <1%
- Africa <1%

Symposium attendance is even more dominated by U.S. than membership
### All Symposium publications 2010 – 2019

<table>
<thead>
<tr>
<th>Country</th>
<th>% all contributions</th>
<th>% papers</th>
<th>% non-papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>86.9</td>
<td>78.9</td>
<td>93.2</td>
</tr>
<tr>
<td>Canada</td>
<td>3.1</td>
<td>4.7</td>
<td>1.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.4</td>
<td>2.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Finland</td>
<td>0.8</td>
<td>1.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Australia</td>
<td>1.0</td>
<td>1.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.6</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.7</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Germany</td>
<td>0.7</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>All other countries</td>
<td>4.8</td>
<td>7.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

U.S. also dominates publications, particularly in non-paper contributions.
Symposium engagement initiatives

• **Conference committees and roles**
  • 1996: International Liaison*
  • 2014: International Committee*
  • International lunch*
    • First year: 13 attendees
    • 2014: Incorporated into the conference registration system
    • 2019: 64 attendees
  *as of 2021 these are now called Global Liaison, Committee, lunch

• **Travel Grant Program**
  • Created in 2014 thanks to a contribution from Henry Walker
  • Faculty and teachers who have never attended the conference
  • Up to $500 of funding and free registration
  • 2020: twenty awards given, seven to people outside the U.S.
Improving Symposium engagement

• **Organization/Administrative**
  - Collect & report more data
  - Re-examine and possibly expand the role of the Symposium Global Committee
  - Encourage more non-U.S. SIGCSE membership & local SIGCSE chapters
  - Increase initiatives to recruit non-U.S. Ph.D. students as SIGCSE members

• **Authorship**
  - Encourage panels and special sessions to include non-U.S. members
  - Place a greater emphasis in the Symposium CFP on global perspectives, international participation, and multi-national collaborations
Improving Symposium engagement

• **Reviewing**
  • Improve recruitment of reviewers from outside the U.S.
  • Develop resources to provide training with guidelines about global perspectives

• **Funding/Attendance/Experiences**
  • Allow more than $500 for non-U.S. Travel Grant recipients
  • Create a new travel grant program for non-U.S. (repeat) attendees
  • Better advertise travel grant programs through SIGCSE chapters
  • Investigate alternative modes of “attendance” with lower costs
  • Continue and expand the SIGSCE Symposium “buddy” program, piloted in 2020, expanded for 2021 to include all attendees (not just non-U.S.)
Improving Symposium engagement

• Recognition/Awards
  • Endorse awards for non-U.S. participation
    • Best multi-national paper
    • Best global perspective

• Other ideas
  • What do you think would help?
  • Join us at the 2021 Special Event (pre-Symposium) Improving Geographic Diversity at the SIGCSE Technical Symposium
    • Register during Symposium registration process.
    • Free, with all Symposium registrations!
    • Two sessions – each the same but different participants (you pick one that works best for you)
      • Thursday, March 11 @ 8:00am-12:00pm (ET) and 8:00pm-12:00am (ET)
    • http://sigcse2021.sigcse.org/schedule/specialevents/