Howdy!
Welcome!
General Information
Technical Program
Keynote by Mary Shaw
Welcome ICSE Attendees

Sol Greenspan
Program Director
Computing and Communication Foundations
Computer and Information Science and Engineering
National Science Foundation, USA
Attendees (as of 5/17)

Main Conference: 968
All heads: 1227
Ca. 39% students

3rd place (~ICSE 2015) for main conference
5th place for total headcount
Attendees (as of 5/14)

Attendees from **51 different countries**

**Also strong local attendance:** 78 attendees from Texas
If Texas were its own country it would be number 3 on the list – *everything is bigger in Texas*....
ICSE 2016 Pre-Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Date</th>
<th>Event</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat 14\textsuperscript{th}</td>
<td>AST</td>
<td>Sun 15\textsuperscript{th}</td>
<td>SEHS</td>
<td>Mon 16\textsuperscript{th}</td>
<td>CSED</td>
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<tr>
<td>Mon 16\textsuperscript{th}</td>
<td>SEAMS</td>
<td>Tues 17\textsuperscript{th}</td>
<td>MOBILESoft</td>
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<tr>
<td>ICPC</td>
<td>MSR</td>
<td>ICSSP</td>
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</table>

**Co-located Workshops**
- 412 Workshops
- 422 NFS, DS, TB
- 111 Others
ICSE 2016 Main Conference

<table>
<thead>
<tr>
<th></th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
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</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Opening Awards I</td>
<td>Awards II</td>
<td>HMA Keynote</td>
</tr>
<tr>
<td>8:30–</td>
<td>ICSE Keynote</td>
<td>ICSE Keynote</td>
<td>SEIP Keynote</td>
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<tr>
<td>10:30</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>11:00</td>
<td>SEIS</td>
<td>TECH RES</td>
<td>TECH RES</td>
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<td>11:00–</td>
<td>TECH RES</td>
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<td>SEIS</td>
<td>SEET</td>
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<tr>
<td>12:30</td>
<td>TECH RES</td>
<td>SRC Finalist</td>
<td>POSTERS</td>
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<tr>
<td>2:00</td>
<td>LUNCH BREAK</td>
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<td>2:00</td>
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<td>2:00–</td>
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<td>3:00</td>
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<td>3:00</td>
<td>TECH RES</td>
<td>DEMOS</td>
<td>SEET</td>
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<td>3:00</td>
<td>DEMOS</td>
<td>TECH RES</td>
<td>DEMOS</td>
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<tr>
<td>4:00</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>4:00</td>
<td>V2025</td>
<td>V2025</td>
<td>Awards III Closing</td>
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<tr>
<td>4:00–</td>
<td>TECH RES</td>
<td>TECH RES</td>
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<tr>
<td>4:00–</td>
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<tr>
<td>4:00–</td>
<td>SEIP</td>
<td>DEMOS</td>
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<tr>
<td>4:00–</td>
<td>TECH RES</td>
<td>POSTERS</td>
<td></td>
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<tr>
<td>4:00–</td>
<td>DEMOS</td>
<td>TECH RES</td>
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</tr>
<tr>
<td>5:45</td>
<td>TOWN HALL Awards IV</td>
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<tr>
<td>5:45</td>
<td>Reception</td>
<td>Banquet</td>
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</tbody>
</table>

Four plenary sessions:
- Keynotes
- Awards I, II, III
- Awards IV in Town Hall

START EVERY DAY AT 8:30 AM!
## ICSE 2016 Main Conference

### ICSE 2016 Tracks:
- **Technical Research**
  - SE in Practice
  - SE Education & Training
  - SE in Society
- **Visions of 2025 & Beyond**
  - Posters
  - Demonstrations
  - Doctoral Symposium
  - ACM Student Research Competition
- **SCORE**

### Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
</tr>
</thead>
</table>
| 8:30 – 10:30 AM | Opening Awards I  
ICSE Keynote | Awards II  
ICSE Keynote | HMA Keynote  
SEIP Keynote |
| 10:30 – 11:00 AM | BREAK | | |
| 11:00 – 12:30 PM | SEIS  
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TECH RES  
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SEIS | TECH RES  
TECH RES  
TECH RES  
SEIP  
SEIT  
POSTERS  
SEIS |
| 12:30 – 2:00 PM | LUNCH BREAK | | |
| 2:00 – 3:30 PM | TECH RES  
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DEMOS | TECH RES  
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DEMOS | TECH RES  
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SEET  
TECH RES  
TECH RES  
DEMOS |
| 3:30 – 4:00 PM | BREAK | | |
| 4:00 – 5:30 PM | V2025  
TECH RES  
TECH RES  
SEIP  
TECH RES  
DEMOS | V2025  
TECH RES  
TECH RES  
SEIP  
TECH RES  
DEMOS | Awards III  
Closing |
| 5:45 – 7:00 PM | TOWN HALL  
Awards IV  
Reception  
Banquet | | |

- New!
- Expanded
- More time
- Thesis in 3

- 55 Parallel Sessions
Social Events

Reception tonight
- Live music
- ICSE posters
- ACM SCR
- SCORE

Banquet
- Bullock Texas State History Museum
- Texican buffet
- More live music
- Longhorns & trick roper
- Visit downtown Austin

PLEASE TURN TICKETS THAT YOU WILL NOT USE INTO THE REGISTRATION DESK. IF YOU NEED A TICKET PUT YOUR NAME ON THE LIST ON THE MESSAGE BOARD TO BE ENTERED INTO A LOTTERY.
Technical Research Program

Willem Visser
Stellenbosch University, South Africa

Laurie Williams
North Carolina State University, USA

ICSE Program Committee Chairs
Review all submissions
engage in online discussions
try to reach consensus decision

monitor discussions
review PC !rejects
attend meeting

89 PC

28 PB
Google+ and Hangout

Here are the links you need to watch the hangout. The first one:

https://plus.google.com/events/ccjji6tbq59j93o107egdncsdv0

For those that missed the presentation here you go:

http://youtu.be/Lk3nrbF6Wl

You can probably skip over the first 2 mins where we wait for people to join.

The review will follow in the comments below.

- All papers get at least 3 reviews
  - Some will get 4 (extra from PB member)
- All papers will get a chance at a rebuttal
  - Right after PC review, and it will come about 3 days after the start of online discussion
- All papers will get a summary of the decision
- Author feedback will be solicited
Submissions

<table>
<thead>
<tr>
<th>Year</th>
<th>Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>441</td>
</tr>
<tr>
<td>2012</td>
<td>408</td>
</tr>
<tr>
<td>2013</td>
<td>461</td>
</tr>
<tr>
<td>2014</td>
<td>495</td>
</tr>
<tr>
<td>2015</td>
<td>452</td>
</tr>
<tr>
<td>2016</td>
<td>530</td>
</tr>
</tbody>
</table>

> 1450 authors
> 40 countries
Paper Flow

- Desk Reject: 530
- Online Discussion: 513
- PC Reviewing: 320
  - 19 per PC (PB)
- Online Discussion: 193
  - 7 per PB
- PB Meeting: 35
  - 65

19% Acceptance
By the numbers...

1758 Reviews (3.4 per paper)

6350 discussion entries (12 per paper)

386,000 words in discussion (750 per paper)

4x
## Most Accepted Topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical software engineering</td>
<td>32</td>
</tr>
<tr>
<td>Program analysis</td>
<td>24</td>
</tr>
<tr>
<td>Mining software engineering repositories</td>
<td>21</td>
</tr>
<tr>
<td>Software testing</td>
<td>20</td>
</tr>
<tr>
<td>Software evolution and maintenance</td>
<td>18</td>
</tr>
<tr>
<td>Debugging, fault localization, and repair</td>
<td>14</td>
</tr>
<tr>
<td>Human factors and social aspects of SE</td>
<td>11</td>
</tr>
<tr>
<td>Mobile applications</td>
<td>10</td>
</tr>
<tr>
<td>Program comprehension</td>
<td>10</td>
</tr>
<tr>
<td>Programming languages</td>
<td>10</td>
</tr>
</tbody>
</table>
Author Review Quality Ratings

**Before**
- ACCEPT: 82%
- BEAT: 12%

**After**
- ACCEPT: 64%
- BEAT: 23%

**Accept**
- positive: 27%
- neutral: 18%
- negative: 55%

**BEAT**
- positive: 13%
- neutral: 13%
- negative: 64%
27 Technical Research Sessions
So many choices 😱

101 ICSE Submissions + 7 Journal First Papers


https://en.wikipedia.org/wiki/Greater_Austin
ACM SIGSOFT Distinguished Paper Awards

Efficient Large-scale Trace Checking Using MapReduce

Marcello Maria Bersani, Domenico Bianculli, Carlo Ghezzi, Srdan Krstic, Pierluigi San Pietro
— Politecnico di Milano, Italy; University of Luxembourg, Luxembourg
Energy Profiles of Java Collections Classes

Samir Hasan, Zachary King, Munawar Hafiz, Mohammed Sayagh, Bram Adams, Abram Hindle
— Auburn University, USA;
Polytechnique Montreal, Canada;
University of Alberta, Canada
Feedback-Directed Instrumentation for Deployed JavaScript Applications

Magnus Madsen, Frank Tip, Esben Andreasen, Koushik Sen, Anders Møller

— University of Waterloo, Canada;
Samsung Research America, USA;
Aarhus University, Denmark;
University of California, Berkeley, USA
ACM SIGSOFT Distinguished Paper Awards

From Word Embeddings To Document Similarities for Improved Information Retrieval in Software

Xin Ye, Hui Shen, Xiao Ma, Razvan Bunescu, Chang Liu
— Ohio University, USA
Guiding Dynamic Symbolic Execution
Toward Unverified Program Executions

Maria Christakis, Peter Müller, Valentin Wüstholz
— ETH Zurich, Switzerland
On the Techniques We Create, the Tools We Build, and Their Misalignments: A Study of KLEE

Eric F. Rizzi, Sebastian Elbaum, Matthew B. Dwyer
— University of Nebraska - Lincoln, USA
ACM SIGSOFT Distinguished Paper Awards

Termination-Checking for LLVM Peephole Optimizations

David Menendez, Santosh Nagarakatte
— Rutgers University, USA
VDTest: An Automated Framework to Support Testing for Virtual Devices

Tingting Yu, Xiao Qu, Myra B. Cohen
— University of Kentucky, USA;
ABB Corporate Research, USA;
University of Nebraska - Lincoln, USA
Work Practices and Challenges in Pull-Based Development: The Contributor’s Perspective

Georgios Gousios, Margaret-Anne Storey, Alberto Bacchelli
— Radboud University Nijmegen, Netherlands; University of Victoria, Canada; Delft University of Technology, Netherlands
Distinguished Reviewers

Shing-chi Cheung
Hong Kong University of Science and Technology, Hong Kong

Eric Bodden
Paderborn University & Fraunhofer IEM, Germany

Lutz Prechelt
Freie Universitaet Berlin, Germany

Chris Bird
Microsoft Research, USA
Co-located Events: MSR 2016

- SIGSOFT Distinguished Paper Awards
  - *Addressing Problems with External Validity of Repository Mining Studies Through a Smart Data Platform*, Fabian Trautsch, Steffen Herbold, Philip Makedonski and Jens Grabowski
  - *Studying the Impact of Switching to a Rapid Release Cycle on Integration Delay of Addressed Issues - An Empirical Study of the Mozilla Firefox Project*, Daniel Alencar Da Costa, Shane McIntosh, Uirá Kulesza and Ahmed E. Hassan

- Most Influential Paper Award from MSR 2006
  - *Mining Email Social Networks*, Christian Bird, Alex Gourley, Premkumar T. Devanbu, Michael Gertz, and Anand Swaminathan

- Data Showcase Award