



38th International Conference on Software Engineering

May 14–21

Howdy!





38th International Conference on Software Engineering

May 14–21



Laura Dillon
Michigan State
University
USA
General Chair

Welcome!
General Information
Technical Program
Keynote by Mary Shaw



Willem Visser
Stellenbosch
University
South Africa
Program Co-Chair



Laurie Williams
North Carolina
State University
USA
Program Co-Chair



Welcome ICSE Attendees

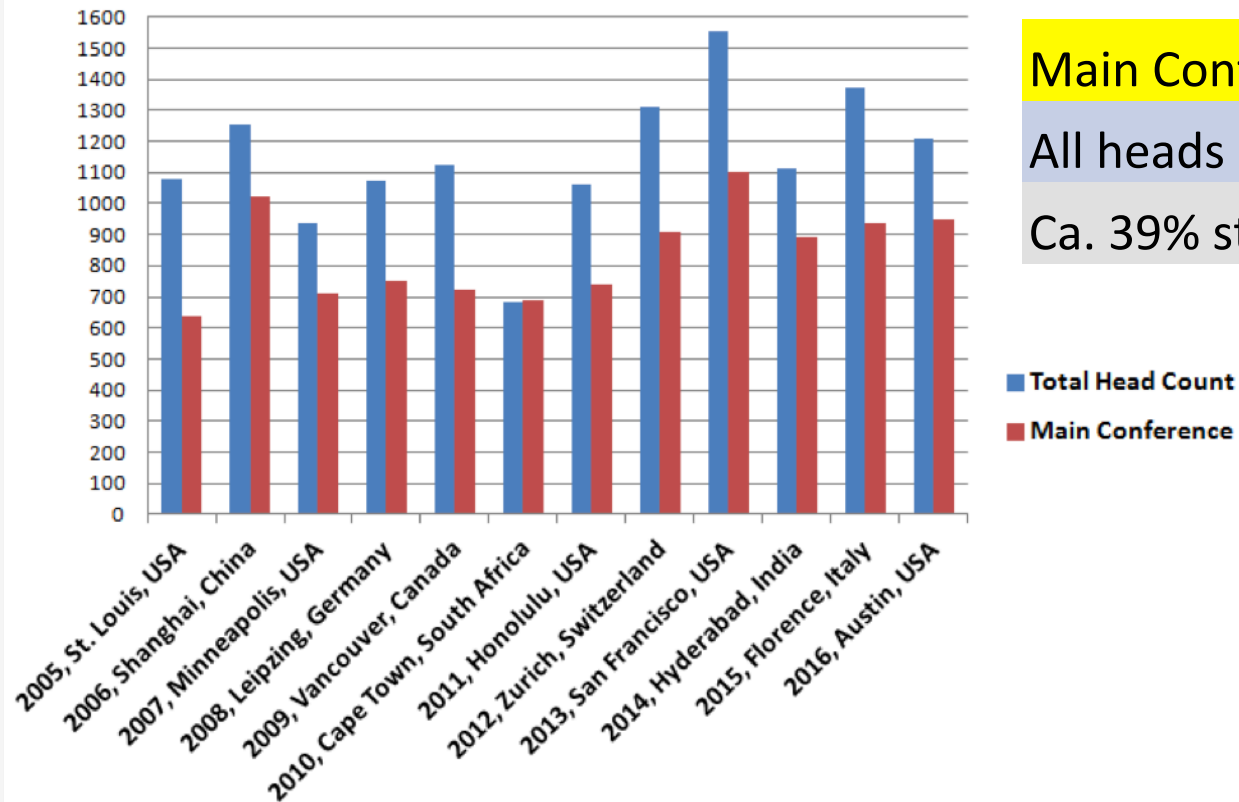


**ICSE 2016
GOLD
SPONSOR**

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

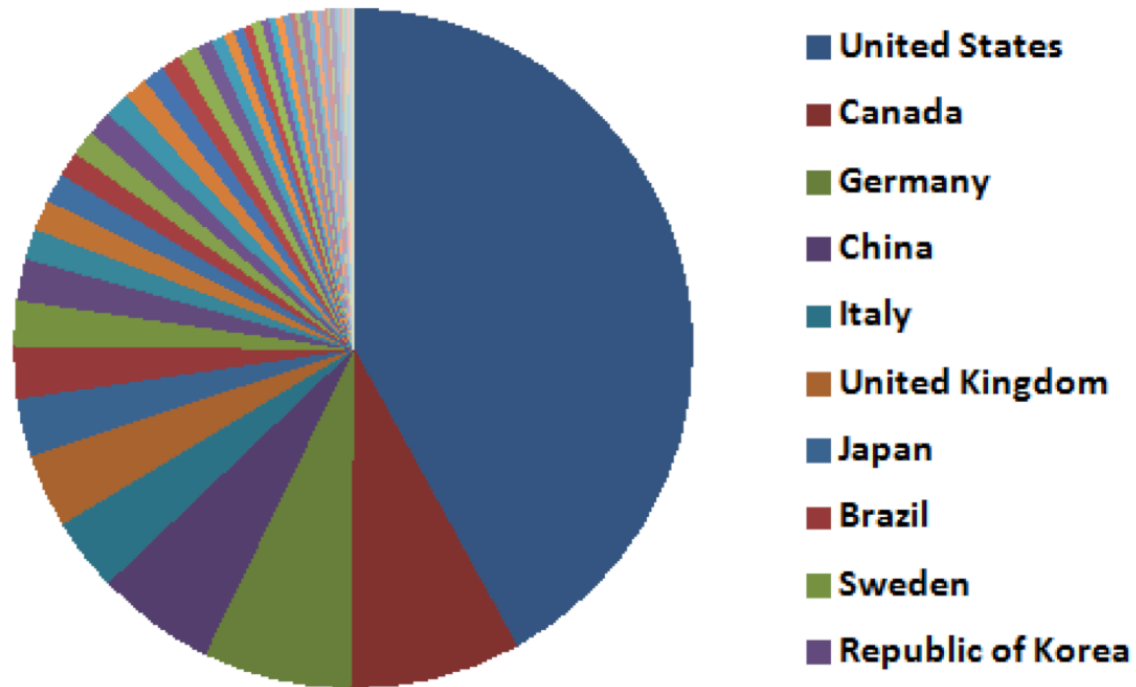
All heads 1227

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 it's own country it would be number 3 on the list – everything is bigger in Texas....



ICSE 2016 Pre-Events

		ICPC	
MSR		SEAMS	
ICSSP		MOBILESoft	
Sat 14 th	Sun 15 th	Mon 16 th	Tues 17 th
AST		SBST	
SEHS		MiSE	
CSED		SE4Science	CESI
		FormaliSE	SEMotion
		TOSE	SER&IP
		VACE	Bridge
		WETSoM	RAISE
		GREENS	New Fac Symp
		SEsCPS	Doc Symp
		GAS	Tech Briefings
		SESoS	

Co-located	412
Workshops	422
NFS, DS, TB	111



ICSE 2016 Main Conference

	Wed	Thu	Fri
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	TECH RES	TECH RES
	TECH RES	TECH RES	TECH RES
	TECH RES	TECH RES	TECH RES
	SEIP	SEIP	SEIP
	SEET	SEIS	SEET
	TECH RES	SRC Finalist	POSTERS
	DOC SYMP	SEET	SEIS
12:30 - 2:00 PM	LUNCH BREAK		
2:00 - 3:30 PM	TECH RES	SEET	TECH RES
	SEET	TECH RES	TECH RES
	TECH RES	TECH RES	TECH RES
	TECH RES	SEIP	SEIP
	SEIP	TECH RES	TECH RES
	TECH RES	DEMOS	SEET
	DEMOS	TECH RES	DEMOS
3:30 - 4:00 PM	BREAK		
4:00 - 5:30 PM	V2025	V2025	Awards III Closing
	TECH RES	TECH RES	
	TECH RES	TECH RES	
		SEIP	
	SEIP	DEMOS	
	TECH RES	POSTERS	
	DEMOS	TECH RES	
5:45 - 7:00 PM	TOWN HALL Awards IV		
	Reception	Banquet	

Four plenary sessions:

- Keynotes
- Awards I, II, III
- Awards IV in Town Hall

**START EVERY DAY AT
8:30 AM!**



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	TECH RES	SEIP	SEIP
	SEIP	TECH RES	TECH RES
	TECH RES	DEMOS	SEET
	DEMOS	TECH RES	DEMOS
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	TECH RES	TECH RES	
		SEIP	
	SEIP	DEMOS	
	TECH RES	POSTERS	
	DEMOS	TECH RES	
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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

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

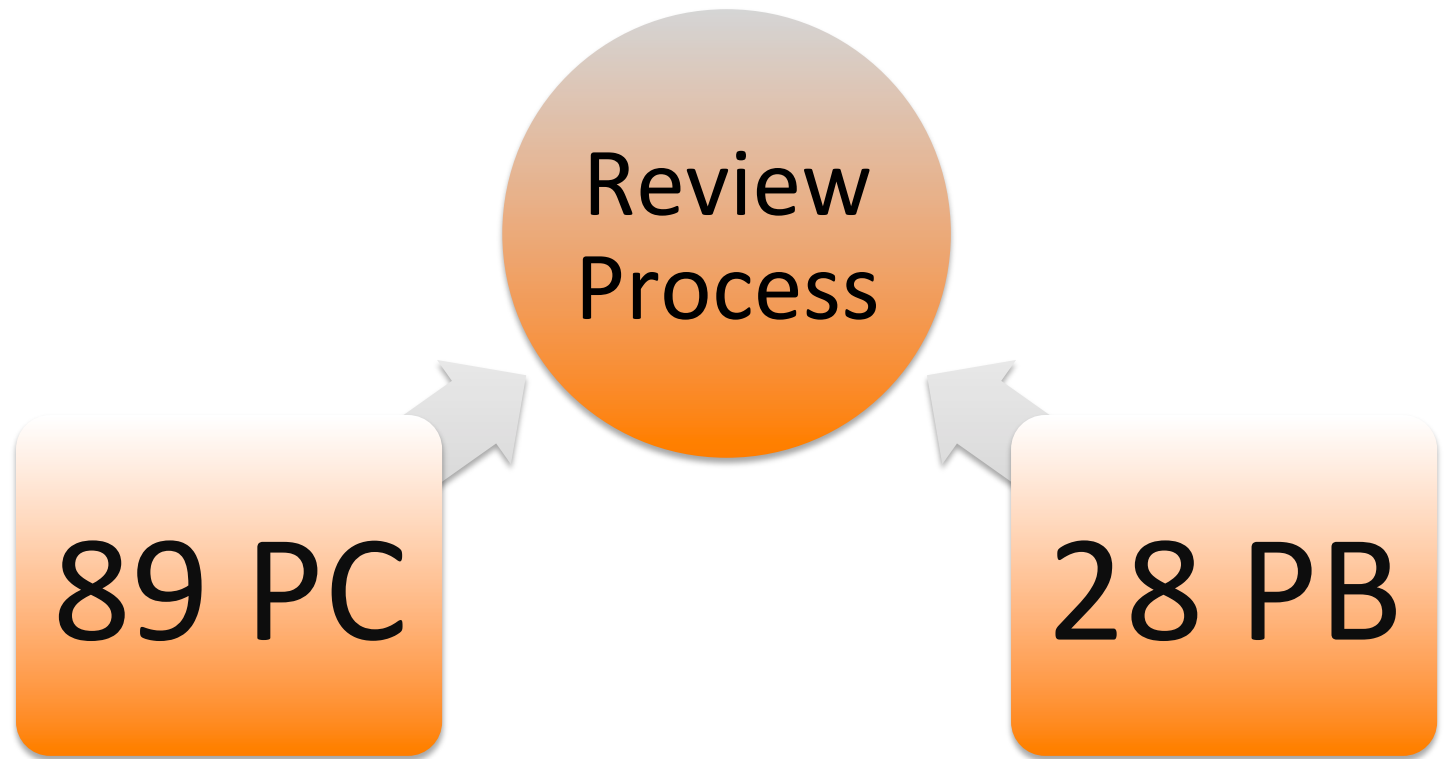
Willem Visser

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

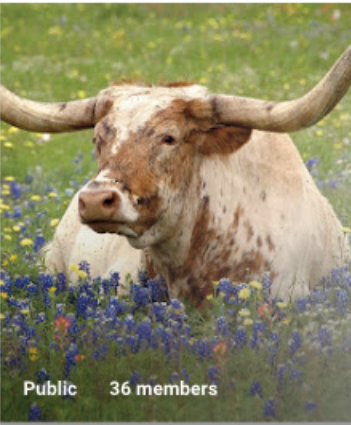
monitor discussions
review PC !rejects
attend meeting



Google+ and Hangout

ICSE 2016 Reviewing

🔔 Notifications on ⚙️



Public 36 members

All posts


Events

Photos

Members (36) [See all](#)

What's new with you?

Text Photos Link Video Event Poll




Willem Visser OWNER
Discussion - Jun 30, 2015

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

<https://plus.google.com/events/ccljj6rtq5fj93o107egdncsdv0>

Read more (14 lines)



ICSE Reviewing - Google+
plus.google.com

+1

🔗


▼

Add a comment...

Spread the word

[Invite people](#)

[Share this community](#)



Willem Visser OWNER
Discussion - Jun 30, 2015

For those that missed the presentation here you go <http://youtu.be/LkB3rvbF6WI>

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

Google+ ICSE Reviewing

Author view

- 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, i.e. 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

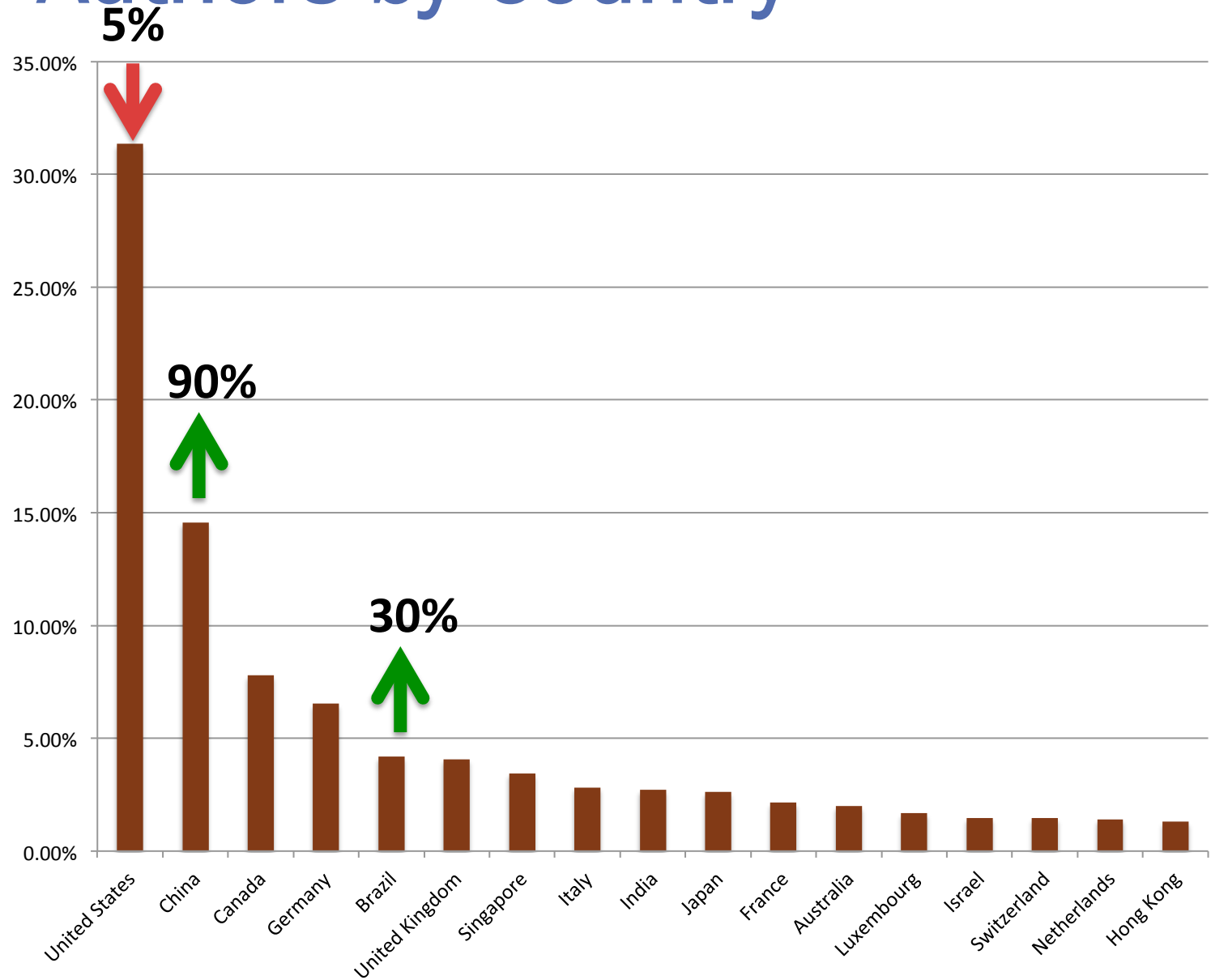
> 1450 authors

> 40 countries

Year	Submissions
2011	441
2012	408
2013	461
2014	495
2015	452
2016	530



Authors by Country





Paper Flow



530

17

Desk
Reject

513

PC Reviewing

19 per PC (PB)

320

Online
Discussion

193

PB Reviewing

7 per PB

57

Online
Discussion

36

100

PB Meeting

65

35



19% Acceptance



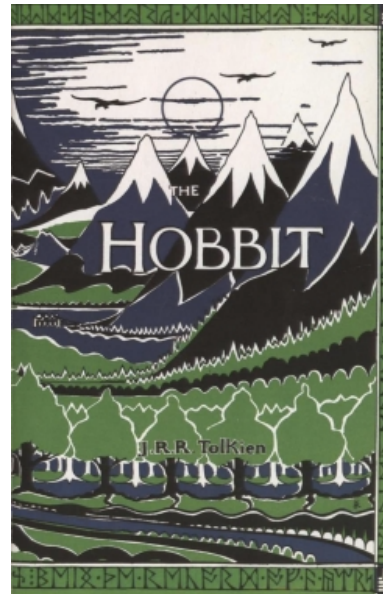
By the numbers...

1758 Reviews (3.4 per paper)

6350 discussion entries (12 per paper)

386,000 words in discussion (750 per paper)

4x





Most Accepted Topics

Topic	Accepted
Empirical software engineering	32
Program analysis	24
Mining software engineering repositories	21
Software testing	20
Software evolution and maintenance	18
Debugging, fault localization, and repair	14
Human factors and social aspects of SE	11
Mobile applications	10
Program comprehension	10
Programming languages	10



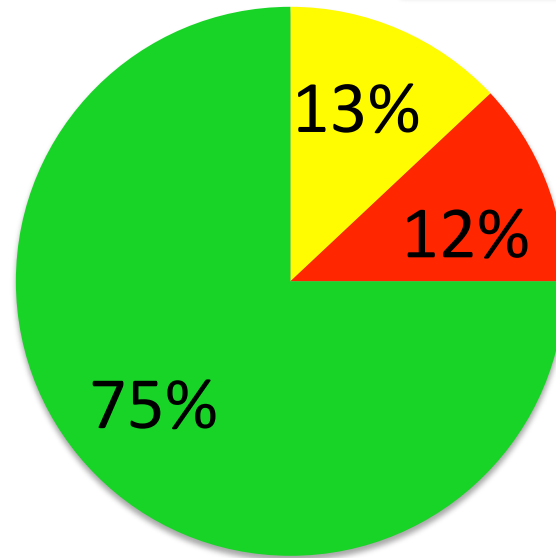
Author Review Quality Ratings

positive

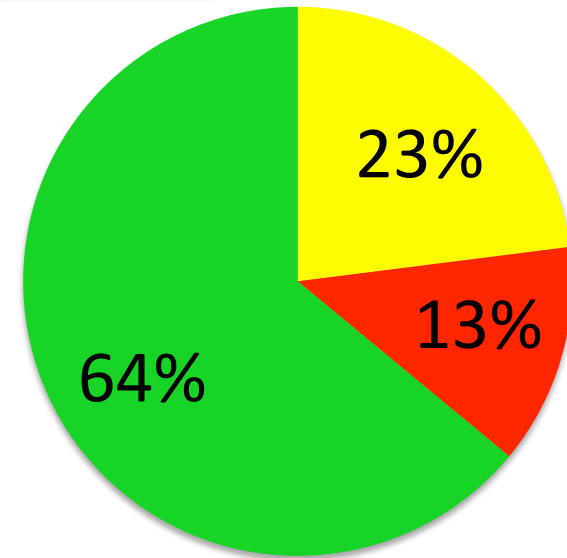
neutral

negative

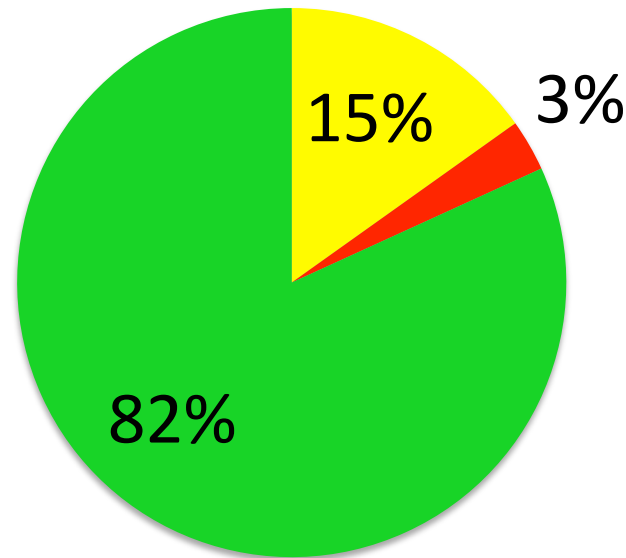
BEFORE



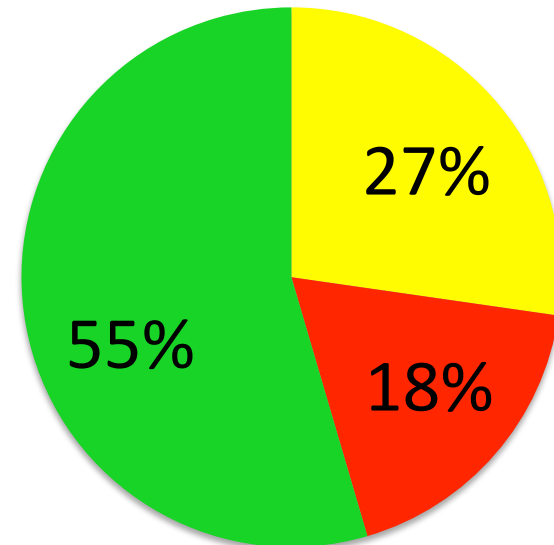
AFTER



ACCEPT



REJECT





27 Technical Research Sessions

So many choices 🤯

101 ICSE Submissions + 7 Journal First Papers

Android
Performance
Empirical
Code Smells
Architecture
Testing I
Dynamic Analysis
Security
Collaborative

Symbolic Execution
Compilers and Emerging
Trends
Energy and Videos
Open Source
Testing II
Effort Estimation and Search
Product Lines
Repair and Model Synthesis
Software Quality

Program Analysis
Concurrency
Maintenance
Defect Prediction
Synthesis
API
Languages
Debugging
Requirements



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



ACM SIGSOFT Distinguished Paper Awards

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



ACM SIGSOFT Distinguished Paper Awards

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



ACM SIGSOFT Distinguished Paper Awards

Guiding Dynamic Symbolic Execution Toward Unverified Program Executions

Maria Christakis, Peter Müller, Valentin Wüstholtz

— ETH Zurich, Switzerland



ACM SIGSOFT Distinguished Paper Awards

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



ACM SIGSOFT Distinguished Paper Awards

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



ACM SIGSOFT Distinguished Paper Awards

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
 - *Data Sets: The Circle of Life in Ruby Hosting, 2003-2015*, Megan Squire