



ICSE 2025

Program Chairs' Remarks

Ottawa, Canada

David Lo and Corina Pasareanu





**What's
New?**



ICSE 2025

- ICSE 2025 marks the 50th anniversary of ICSE, first held in 1975!
- **Nine Research Areas:**
 - **AI for Software Engineering**
 - Analytics
 - **Architecture and Design**
 - Dependability and Security
 - Evolution
 - Human and Social Aspects
 - Requirements and Modeling
 - **Software Engineering for AI**
 - Testing and Analysis

New for 2025 (based on feedback):

- Split of “AI & SE” into two areas
- Introduction of “Architecture & Design”



Review Process Chairs

New for 2025!

- We would like to thank the 3 Process Review Chairs !
 - Rory Lipkis, who helped us identify **AI-generated** papers and reviews
 - Alex Potanin and Bowen Xu, who helped **streamline** the bidding process via human-in-loop AI & improving **matching** of papers and reviewers' expertise





Streamlining Bidding Process

Achieved by automatically creating a manageable number of initial review bids for each PC member while ensuring that each paper, including those on less popular topics, received sufficient bids.

The Toronto Paper Matching System (TPMS) was used to identify papers that match a particular PC member's expertise.

To evaluate the new process, we have sought **feedback from PC members** multiple times and allowed PC members to customize or even turn off the automated bid creation in Cycle 2.

We have received a lot of positive feedback, and almost all reviewers have chosen to use it in Cycle 2

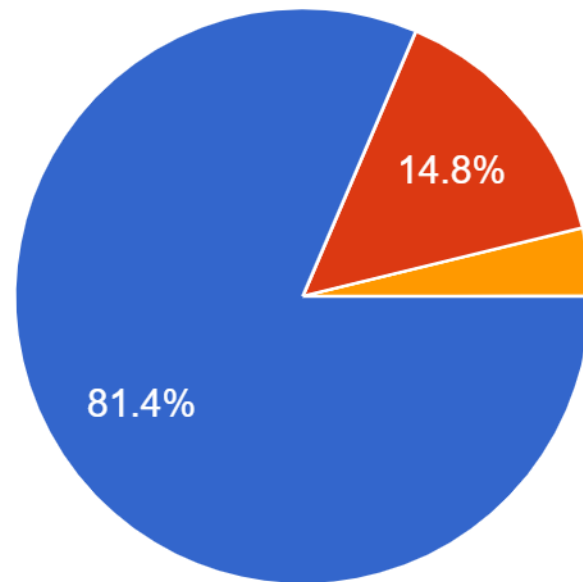


Streamlining Bidding Process

The automatically generated bids

183 responses

 Copy



- reduce my workload in bidding.
- do not reduce my workload in bidding.
- increase my workload in bidding.



Shadow PC

New for 2025!

- Meant to educate young reviewers
 - Cycle 2 only
 - Only for submissions that explicitly indicate participation
- Run by **Domenico Bianculli** and **Patanamon Thongtanunam**
- 50 members
- **Matt Dwyer** served as the training chair, providing a training session to all Shadow PC member
- Thank you!



Sustainable Review Effort

New for 2025!

- Piloting a scheme to reduce the effort of reviewing conference extensions that are submitted to journals:
 - IEEE Transactions on Software Engineering (TSE)
 - ACM Transactions on Software Engineering and Methodology (TOSEM)
- Allowing journals to invite some of the reviewers of the original conference submission
- Goals
 - Leverage the effort of these reviewers
 - Reduce turnaround time
 - Improve consistency

We thank **Mauro Pezze** and **Sebastian Uchitel** for this initiative!



Selection Process



Cycle 1

**716
Abstracts**

**Excluding Incomplete
Submissions**

**523
Research Papers**

**46 Accepted +
69 Major Revision**

**Review + Discussion
(3-4 PCs + 1 AC)**

508 papers

**Desk Rejections
+ Early
Withdrawals**



**69 Revised
Submissions**



**Review +
Discussion**



**66
Accepted**

**112 papers
accepted in total!**



Cycle 2

**950
Abstracts**

**Excluding Incomplete
Submissions**

**662
Research Papers**

**66 Accepted +
74 Major Revision**

**Review + Discussion
(3-4 PCs + 1 AC)**

642 papers

**Desk Rejections
+ Early
Withdrawals**



**73 Revised
Submissions**



**Review +
Discussion**



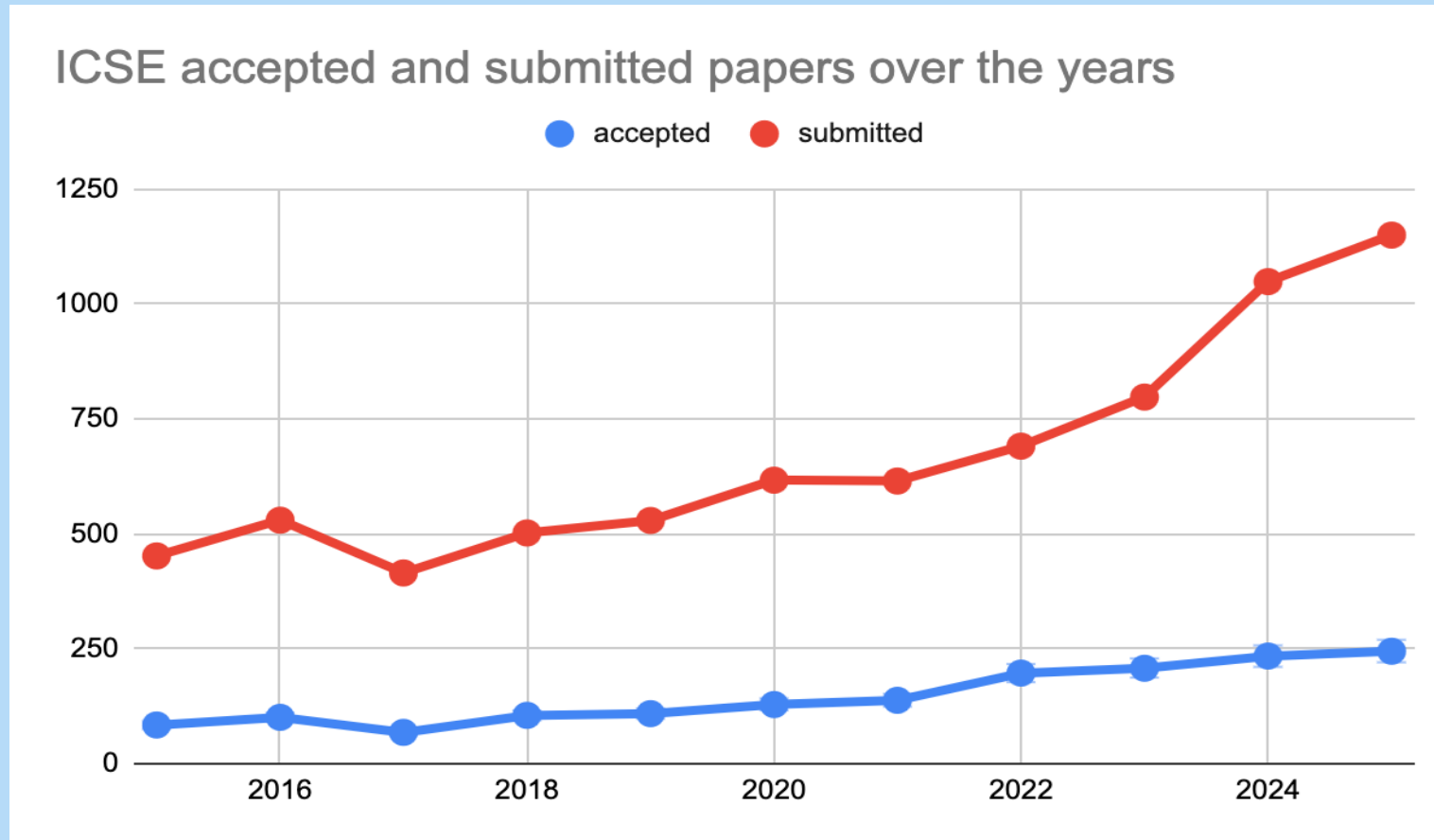
**67
Accepted**

**133 papers
accepted in total!**



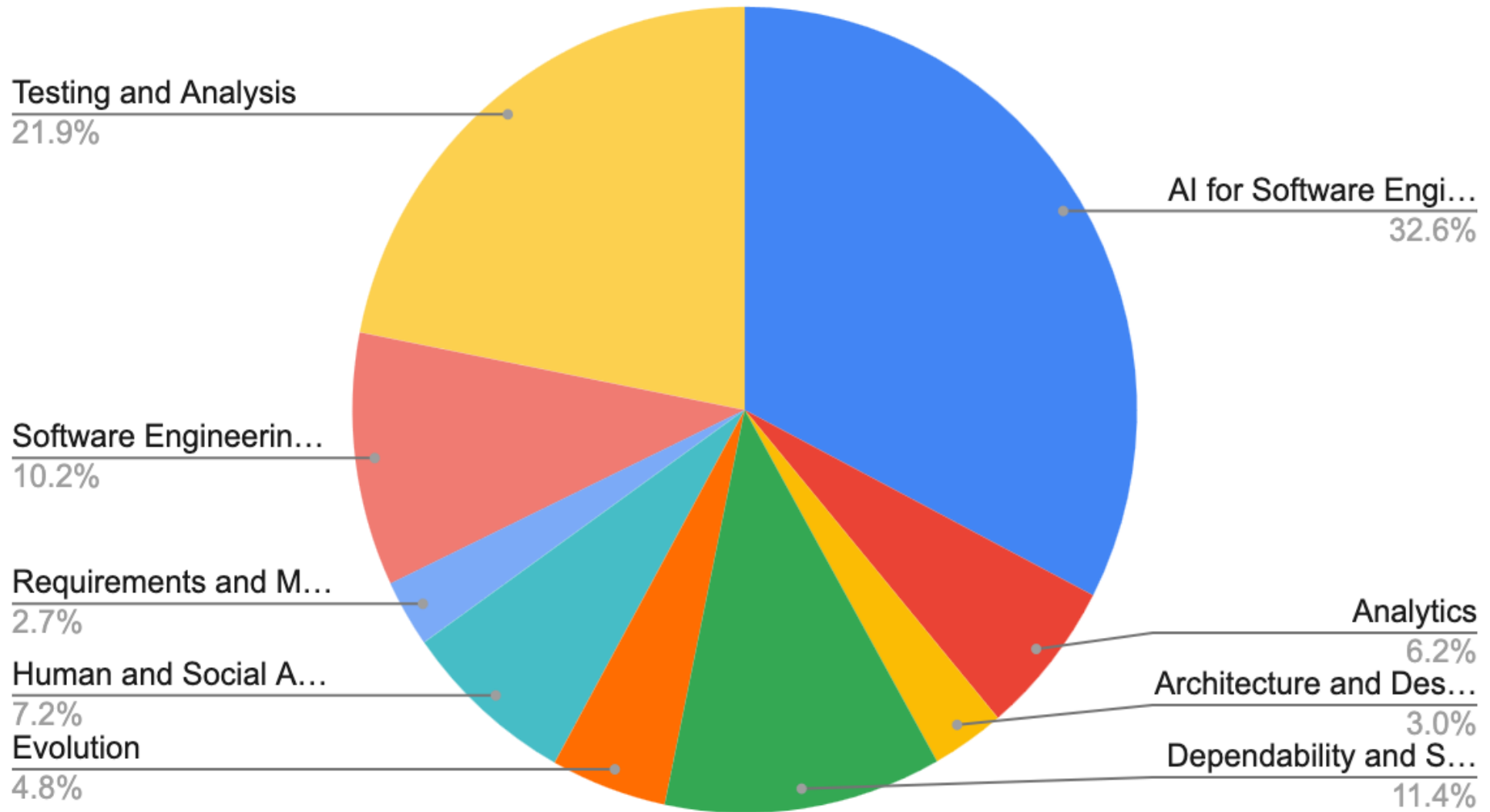
Main Research Track (Summary)

- Accepted **245** papers out of **1,150** submissions (**new records!**)





Submissions by Primary Area





Program Committee



Area Chairs

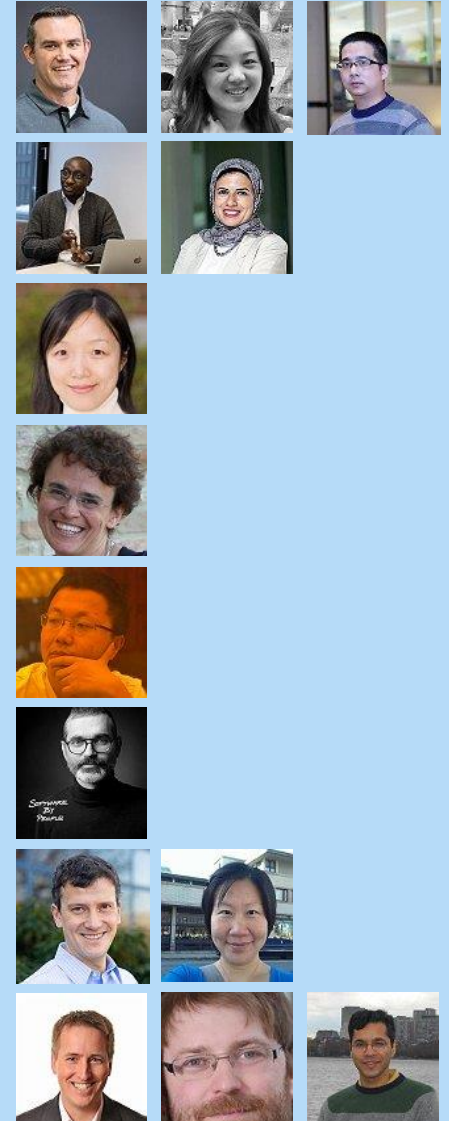
We would like to thank the 14 Area Chairs!

- Managed **48-108** papers across the two cycles
 - Note: Some areas have more submissions
- Participated in many synchronous and asynchronous discussions, including in **18** coordination meetings across the two cycles
- Recommended PC members
- Helped us ensure that submissions belonging to a given research area are rigorously and fairly reviewed
- Helped select the SIGSOFT Distinguished Paper Awards and the Distinguished Reviewer Awards



Area Chairs

1. *AI for Software Engineering*: Christian Bird, Lin Tan, and Xin Xia
2. *Analytics*: Tegawende F. Bissyande, and Sarah Nadi
3. *Architecture and Design + Requirements and Modeling*: Yuanfang Cai
4. *Dependability and Security*: Raffaella Mirandola
5. *Evolution*: Xin Peng
6. *Human and Social Aspects*: Alexander Serebrenik
7. *Software Engineering for AI*: Yuriy Brun and Wei Le
8. *Testing and Analysis*: Gordon Fraser, Lars Grunske, and Sarfraz Khurshid.





Program Committee

- We would like to thank the Program Committee members!



ESEC/FSE 2023



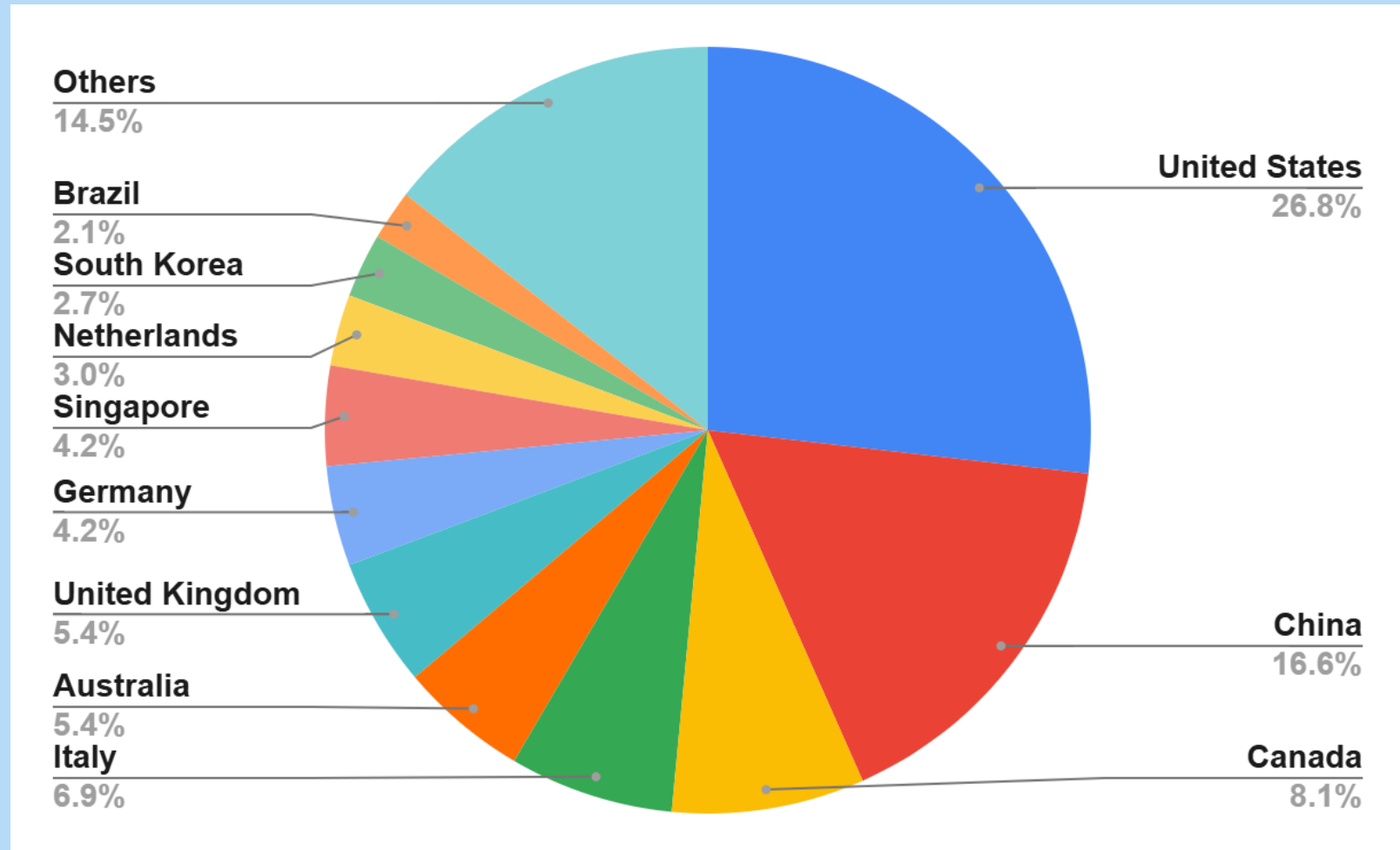
ICSE 2024

+ 2 Additional Virtual Meetings



PC Statistics (excl. ACs/RPCs/PC Chairs)

- 332 PC members
 - 45% more than 2024
- 32 countries
 - 199 affiliations
- All Continents (except Antarctica)





PC Statistics (excl. ACs/RPCs/PC Chairs)

- Gender diversity:
 - 33% Female, 67% Male
- Geographic diversity:
 - 37% Americas
 - 30% Europe, the Middle East, and Africa (EMEA)
 - 33% Asia-Pacific (APAC)
- PC experience diversity:
 - 27% Past ICSE(s) but not ICSE'24
 - 35% ICSE 2024 PC
 - 38% First time (served in other PCs)
- Self nomination:
 - 51% Self-Nominated





More Statistics & Analysis

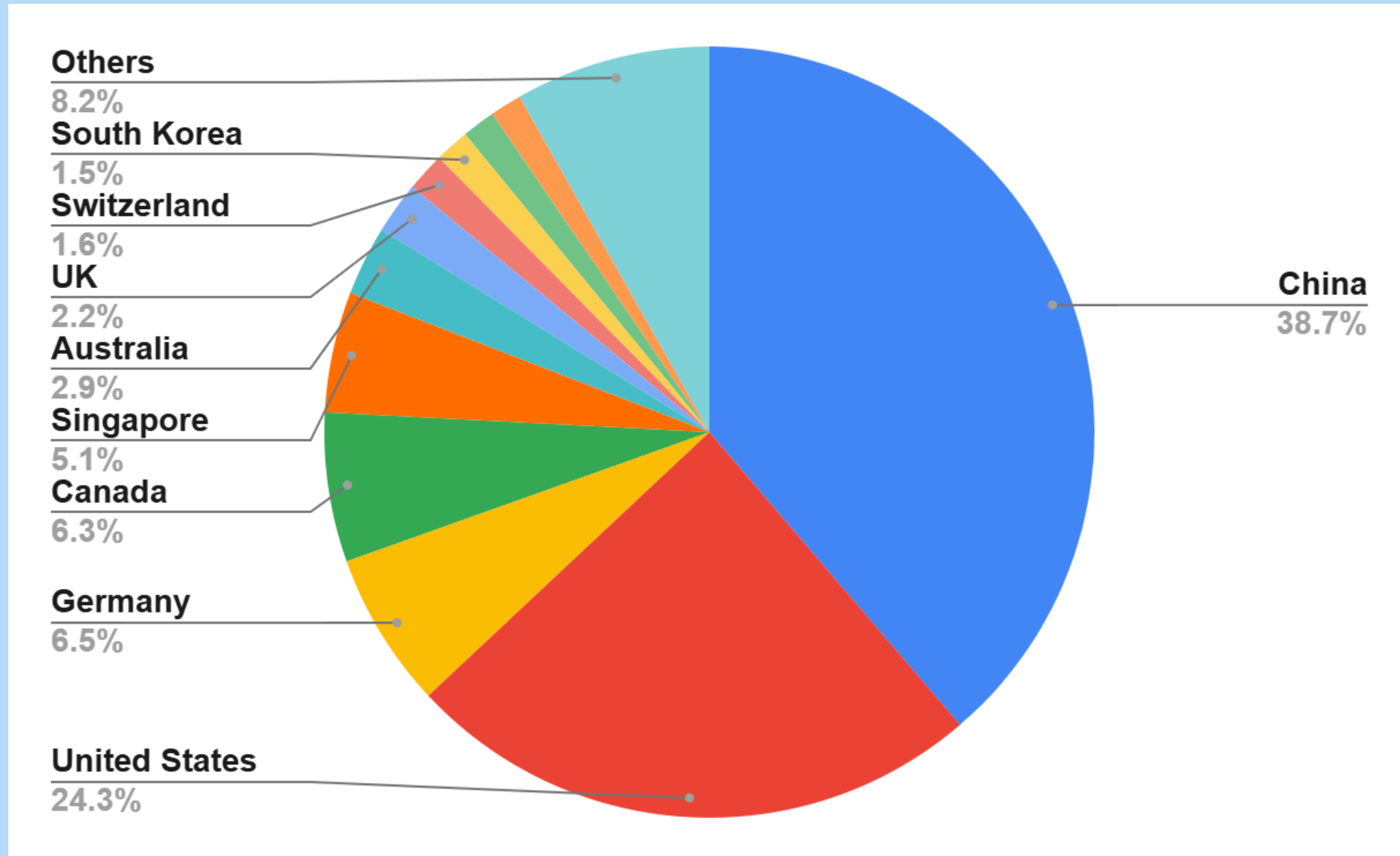


Submitted Paper Statistics

45
Countries

(from entries
with country
info)

3706 Authors

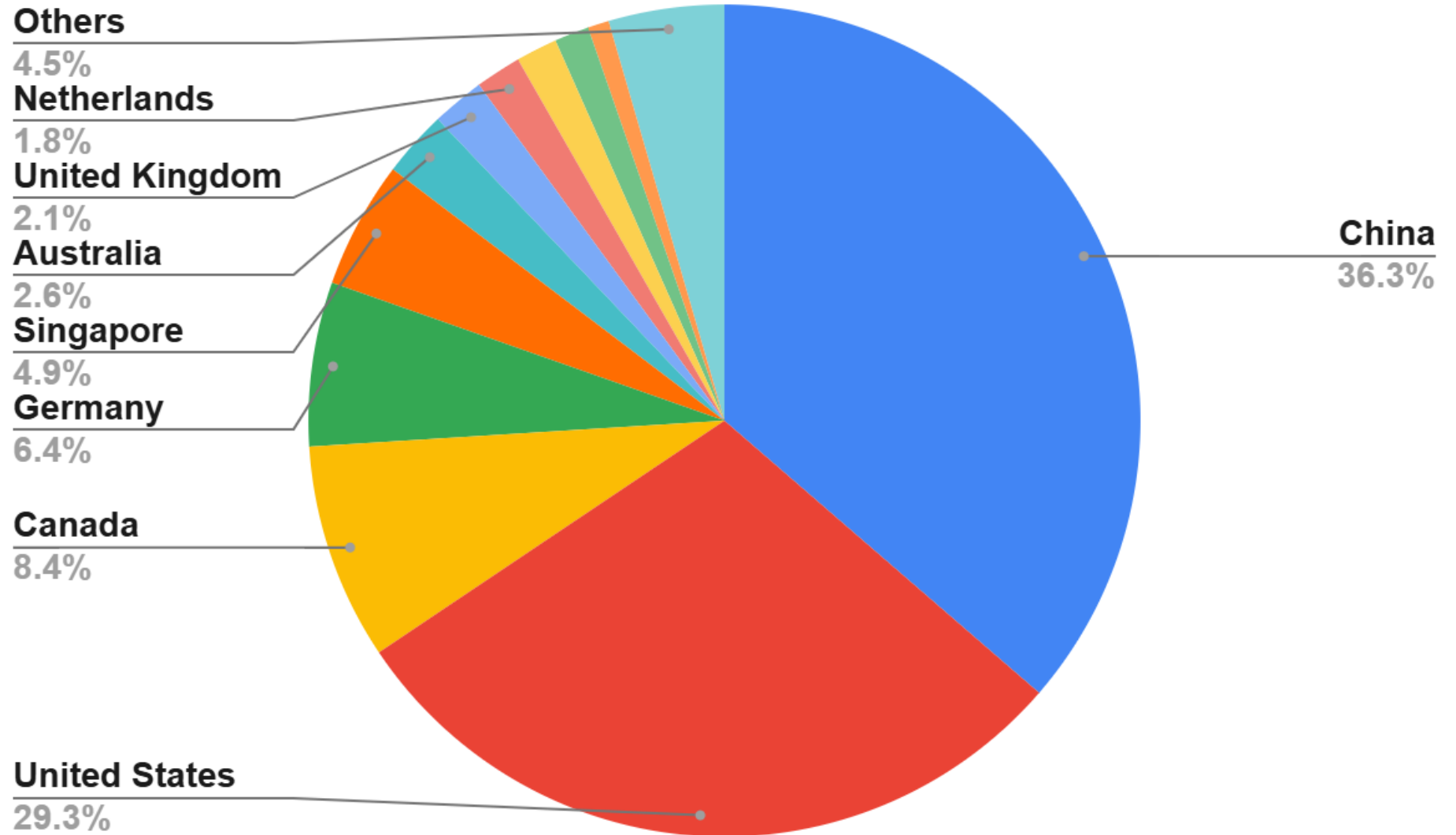


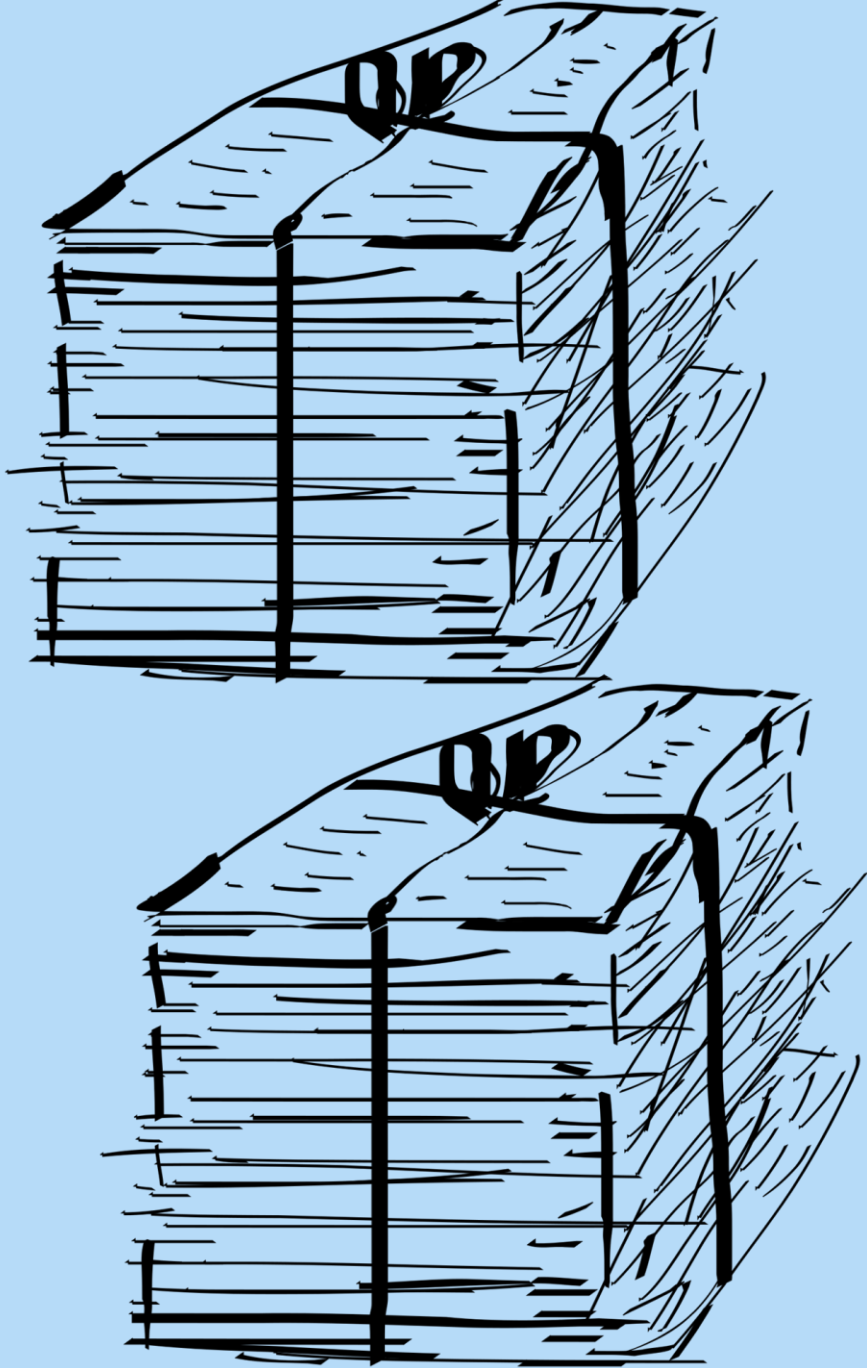
Accepted Paper Statistics

26
Countries

(from entries
with country
info)

1174 Authors





5,311 reviews & meta-
reviews

14,062 comments
(ave. **12.2** comments/paper)

5.28 million words

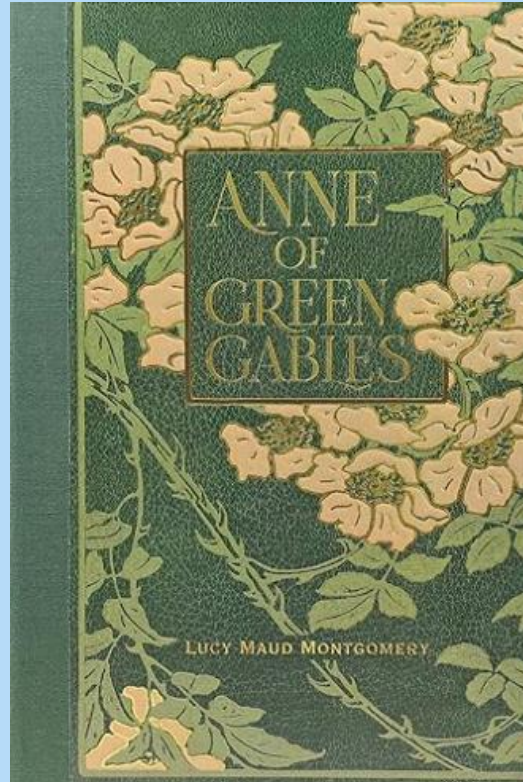


ChatGPT 4o ▾

Well known Canadian book, no controversy

A well-known Canadian book with no controversy—uplifting, wholesome, and widely loved—is:

🌸 ***Anne of Green Gables*** by L. M. Montgomery
(1908)



Word Count

77,000 words

Estimated based on
page count

Pages

308 pages

<https://www.readinglength.com/book/isbn-1324095148>



Program



Program

Keynotes

Award talks

Blended program

- Research track
- Tech Briefings
- SEIP, SEIS, NIER, JF, SEET, ...

Posters

Wed 30 Apr

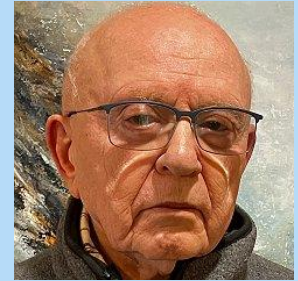
Displayed time zone: **Eastern Time (US & Canada)** [change](#)

09:00	12m	☆	Welcome to ICSE 2025
<i>Day opening</i>			G: Timothy Lethbridge University of Ottawa, G: Lionel Briand University of Ottawa, Canada; Lero centre, University of Limerick, Ireland
09:12	18m	☆	Overview of the Program from the Program Chairs
<i>Talk</i>			I: David Lo Singapore Management University, I: Corina S. Păsăreanu Carnegie Mellon University
09:30	60m	☆	David Parnas Keynote: Regulation of AI and Other Untrustworthy Software
<i>Keynote</i>			K: David Parnas



Keynotes

David Lorge Parnas, on *Regulation of AI and Other Untrustworthy Software*



Neha Rungta, on *Engineering Correctness for a Domain*



Patricia Lago, on *Software Sustainability and Its Engineering: How Far Have We Come?*





Award Talks - I

Martin Rinard (ACM SIGSOFT Outstanding Research Award Winner), on *Research in Program Repair and Approximate Computing: A Retrospective*



Bashar Nuseibeh (IEEE Computer Society Harlan D. Mills Award Winner), on *Context 2.0: The World in the Machine*





Award Talks - II

Authors of lccTA: Detecting Inter-Component Privacy Leaks in Android Apps, Winner of Most Influential Paper ICSE N-10 Award

Li Li, Alexandre Bartel, Tegawendé F. Bissyandé, Jacques Klein, Yves Le Traon, Steven Arzt, Siegfried Rasthofer, Eric Bodden, Damien Octeau, and Patrick D. McDaniel

**Wed, 30 April 2025
14:00 - 15:30
at Canada Hall 1 & 2**



Award Session: Distinguished Papers

Thu 1 May 2025

09:00 - 09:30

at Canada Hall 1 & 2

Award Session: Distinguished Reviewers

Thu 1 May 2025

19:00 - 22:30 (Banquet)

at Canada Hall 1 & 2



Final Thanks!

- **All** the authors who submitted to ICSE 2025
- ICSE 2025 General Chairs, **Lionel Briand** and **Timothy Lethbridge**, for their support and guidance
- ICSE 2024 Program Chairs, **Abhik Roychoudhury** and **Margaret-Anne Storey**, for their valuable suggestions
- Steering Committee of ICSE chaired by **Arie van Deursen**, for all the guidance and advice