

ARR Info Session July 11th, 2023

ACL 2023



Questions? Ask and vote at **menti.com** using code **8265 2671** or scan this QR code:

ACL Rolling Review (ARR): History

ACL Rolling Review Proposal

- Created in response to community reviewing needs
- Centralized review system
- ARR launched on May 2021

Founding EiC team:

- Amanda Stent
- Goran Glavaš
- Sebastian Riedel
- Pascale Fung
- Graham Neubig (CTO)

Guest EiCs (NAACL & ACL PCs):

- Marine Carpuat
- Aline Villavicencio
- Smaranda Muresan
- Preslav Nakov
- Ivan Vladimir Meza
- Marie Catherine de Marneffe

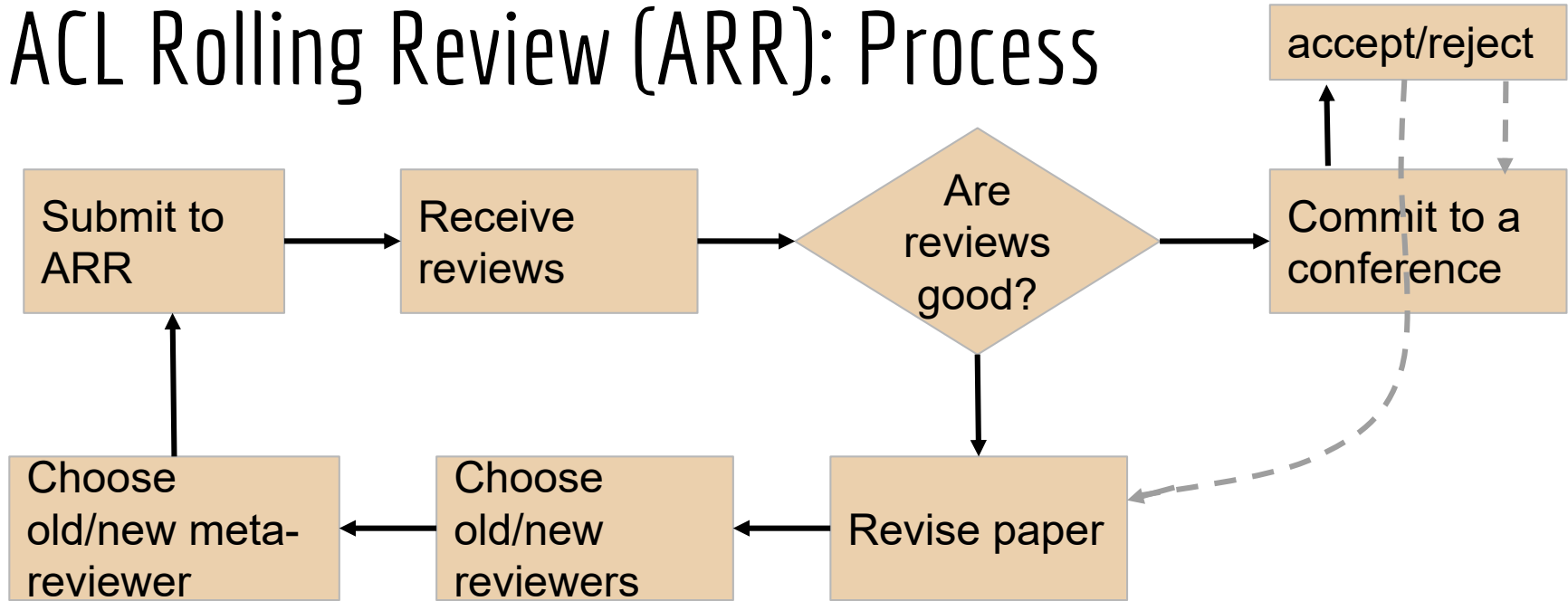


ACL Rolling Review (ARR): Early Days

- ACL 2022 & NAACL 2022
 - ARR submission exclusively
- ACL 2022, EMNLP 2022, EACL 2023, ACL 2023, EMNLP 2023
 - Hybrid submission system
- ACL Reviewing Survey in Summer 2022
 - [Results and Analysis](#)
 - [ARR](#)
 - [improvements](#)



ACL Rolling Review (ARR): Process



Personnel Updates

- **ARR Board (new)**
 - Smaranda Muresan
 - Julia Hockenmaier
 - Yusuke Miyao
 - Tamar Solorio
- **EiCs**
 - Viviane Moreira
 - Lilja Øvrelid
 - Jun Suzuki
 - Mausam
 - Tamar Solorio
- **Tech Lead**
 - Jonathan Kummerfeld
- **Communications Lead**
 - Shubhra Kanti Karmaker Santu
- **Ethics Chairs**
 - Vinodkumar Prabhakaran
 - Malihe Alikhani



Major Updates to ARR - October Cycle

- Review standards: top conferences
- [Freshdesk](#) ticketing system
- Two-month cycles
- Introduction of [tracks](#)
- Guarantee review completion by the 2 month mark
- Author rebuttal



Major Updates to ARR - December Cycle

- Introduction of [senior action editors](#) per track
- Integration of tasks into OpenReview infrastructure (checklists)
- Introduction of [one non student reviewer constraint](#)
- Only [three](#) reviewers per paper



Major Updates to ARR - February Cycle

- Expanded pool of SAEs
- Improved integration of [SAE tasks](#) in OR
- Streamlining of ethics reviews
- Improved internal [documentation](#) of cycle processes for EiCs



Major Updates to ARR -April Cycle

Added reviewer assignment constraints:

- (1) There must be **at least one senior** reviewer (ie., non-student)
- (2) **No two** reviewers of a paper can be **from the same institution**



Major Updates to ARR -June Cycle

Better integration of [ethics review process](#)

Minor bug fixes; improving minor UI issues (are we stabilizing?)



ARR One Year Plan (proposed circa July'22)

- July

- ✓ ○ dedicated openreview tech team member
- ✓ ○ immediately - blog post announcing new EiCs

- August

- ✓ ○ blog post responding to survey
- ✓ ○ Add at least **2-3 new EiCs**

- September

- ✓ ○ implement areas (i.e., "tracks")
- ✓ ○ consider demographics, seniority & affiliation of reviewers in review assignments
- ✗ ○ implement mechanism to request **individual** reviewer (and meta reviewer) change
- ✓ ○ Blog post announcing changes
- ✗ ○ Implement author evaluation of reviews

- October

- ✗ ○ arXiv paper on findings from first year of ARR
- ✓ ○ Extend functionality of the system to require authors to review papers
- ✓ ○ Blog post announcing changes/stats

- November

- ✓ ○ develop guidelines (tutorial) for meta reviewers
- ✓ ○ Blog post announcing changes/stats

- December

- ✗ ○ Align cycles with conferences?
- ✓ ○ Blog post announcing changes/stats

- January

- ✓ ○ Roll out *8 week cycle* and **commitment to 100% reviews on time**

- February

- ✗ ○ mentoring system for junior or *new to field* reviewers

Stats on Committed Submissions to *CL Events

| Conference | Papers Committed | Accepted (main conf. + findings) | Withdrawn | % of <u>committed</u> papers that were accepted |
|-------------------|-------------------------|---|------------------|--|
| EMNLP 2022 | 275 | 170 (97 + 73) | 0 | 61% |
| EACL 2023 | 81 | 44 (24 + 20) | 10 | 62% |
| ACL 2023 | 305 | 193 (129 + 64) | 10 | 63% |

More details on the next two slides for ACL and EMNLP (too few papers for EACL,)

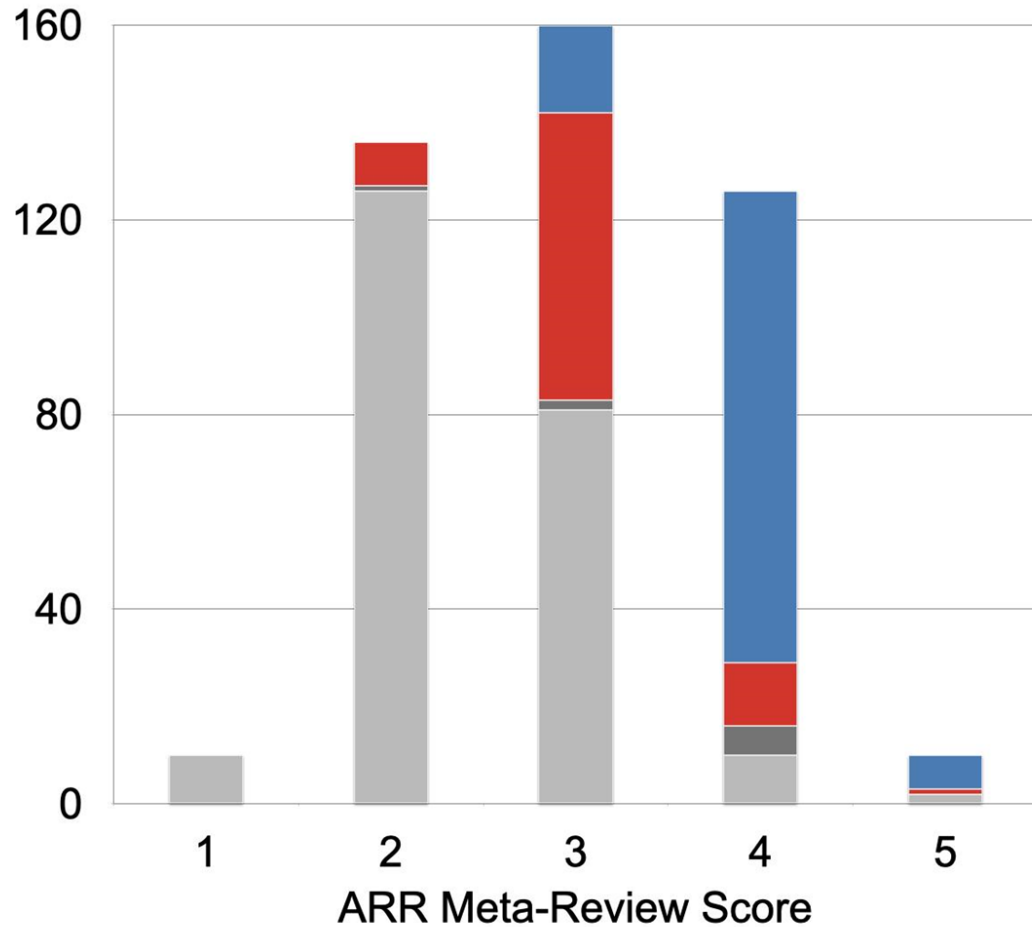


ACL Stats



Outcomes for the papers in the Dec 2022 ARR cycle.

This includes 213 of the 305 papers committed to ACL.



Thank you!

- Authors
- Reviewers
- Action Editors
- Senior Action Editors

Feedback:

- Send to editors@aclrollingreview.org

Consider joining the team!



Tech FAQs

How are reviewers assigned?

- For resubmissions, go back to the same reviewers except if (1) requested otherwise, or (2) the reviewer indicated they cannot review resubmissions
- Constraints: (1) require a non-student reviewer, (2) all from different institutions
- Automatic matching: topic similarity, track match

How are Conflicts-of-Interest managed?

OpenReview COI detection code



Tech FAQs

How are reviewer constraints implemented?

- From the overall reviewers \mathbf{R} group, select a subset of reviewers \mathbf{r} by performing a filter operation on the profiles of the reviewers group \mathbf{R} (so for (1), senior reviewers are those who are not students in their most recent career history entry on their OpenReview profile).
- Decide on the condition that will be applied per paper across all members of the subset group \mathbf{r} , which is either \leq or \geq , and an integer bound (for (1), each paper must have at least 1 senior reviewer so the condition passed to the matcher is " ≥ 1 ")
- For each paper, an additional constraint over the sum of the edges from every reviewer in \mathbf{r} to that paper is added to the max flow matching problem



Tech FAQs

What is the technical infrastructure and personnel?

- CTO [volunteer], manages the team, deals with urgent requests
- OR engineer [paid], runs the cycles
(this has been a BIG help, key to get to 100% on-time cycle completion)
- Tech team [volunteers], working on longer term improvements



EMNLP 2022

Stats



Outcomes for the papers in the April and June 2022 ARR cycles.

This includes 141 of the 274 papers committed to EMNLP

