Resource Packet for PC Chairs

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This is a living document of resources for PC chairs in SIGARCH/TCCA conferences. If you have any additional resources or suggestions to make, send them to Martha Kim (martha@cs.columbia.edu) or Moin Qureshi (moin@gatech.edu). There is also a companion Resource Packet for General Chairs.

Current Best Practices

SIGARCH/TCCA's Recommended Best Practices for Conference Reviewing Process
SIGARCH/TCCA's Recommended Best Practices for ISCA Program Chairs

The SIGARCH and TCCA executive committees recommend that Program Chairs for all SIGARCH-sponsored and TCCA-sponsored conferences follow the above Best Practices for ISCA Program Chairs.

Committee Formation

In forming the program committee, the PC chair needs to ensure that the committee is of the highest quality and also that it has representatives from several communities (i.e., is diverse). This policy encourages submissions from many groups plus offers direct access to different groups of competent reviewers. The PC chair should consider the following when selecting a PC:

- Personal qualities: judgment, reliability, ethics, standards;
- Coverage: technical areas, leading universities, leading companies;
- Balance: technical areas, geographic, academe vs. industry, youth vs. experience, and so on;
- Planning for the future: grooming future program chairs.

There should be significant turnover as well as some overlap between successive PC memberships.

Before picking a committee, the PC chair should consult with prior PC chairs for input on these four issues. It will be helpful if the PC chair of the succeeding conference is invited as an ex-officio member of the program committee and could participate at the PC meeting.

The Architecture PCDB can be a useful resource when sourcing names for your committee. The PCDB aggregates publicly available program committee data dating back to 2014.

Vetting Committees and Authors

It is critical that all PC and ERC reviewers be vetted to ensure that none are sanctioned for academic misconduct.

SIGARCH conferences must vet their PC, ERC, and author list against ACM's Violations Database. Users should log in with their ACM ID and query the database using a list of names as well as the rationale for the query (e.g.,

"ISCA 2022 Program Committee members"). In response to the query, you can expect a message indicating that there were no results found and you may proceed, or a message indicating that you should expect follow up from advocate@acm.org within the next 48 hours. This message does not necessarily mean the individuals you checked appear in the database, only that further information is required. For additional information about the ACM Violations Database, see Enforcement of ACM Policies, or send questions to advocate@acm.org.

For TCCA conferences, the author names must be validated with the "Prohibited Authors List (PAL)" by creating an account at the following link: https://crosscheck.ieee.org/crosscheck/. More information on how to use the CrossCheck website is available here and the guidelines for the appropriate use of the IEEE Prohibited Authors List is available here.

We further suggest that chairs invite people to serve on the PC with some language to the effect of "Your service on the PC is subject to a determination that you are not under any sanctions by ACM/IEEE". This allows sanctioned individuals to decline in advance and heads off excessive querying of the databases and back and forth with ACM/IEEE. Once PC members have tentatively accepted, chairs should vet that list with the ACM/IEEE as outlined above.

Both societies will vet authors at publication time, however we also suggest including a checkbox on the paper submission form where authors attest that they are not under any sanction that would preclude publication at the conference.

Prior to Paper Submission

When picking key dates (submission, rebuttal, PC meeting etc.), it would be good to avoid weekends, holidays and other conferences, to make the process more inclusive and family friendly. It may also be helpful to share the proposed dates with the relevant SC and ECs members before they are publicly announced, so that any concerns/conflicts may be identified early.

Having an up-to-date topic list is useful in doing paper assignments and gathering expertise of the PC members. As topics of interest may change over time, it is probably best to check with recent PC chairs on the topics they observed (and which topics had the most constrained expertise -- this can help with scouting for expert reviewers on the topic early on).

Configuring HotCRP

When configuring HotCRP, it is imperative that only minimal access be given to help deter and prevent reviewer misconduct. HotCRP can be configured to disallow bulk downloads and track user activity. We strongly advise that chairs use all available means to allow no wider access than necessary.

Conflict Management

HotCRP still does not provide the best COI coverage or detection. There are some scripts for HotCRP that help with COI detection which is increasingly taking more time for PC organizers given the number of conflicts. Using these scripts will also strengthen the case to migrate these into HotCRP down the road.

For ASPLOS 21, Emery Berger and Christos Kozyrakis pushed conflict checking to reviewers using the conflict-vetter.py script at https://github.com/emeryberger/ASPLOS-2021. The script emails all reviewers with names of all authors whose submissions list them as a conflict. Reviewers were asked to review the entries and notify the PC chairs if they disagree with any of the listings. Paper IDs are encrypted to minimize information leakage.

There's also a conflict checker script that compares the conflicts listed on HotCRP to DBLP. However is somewhat dated (2014) and must run on the same server as HotCRP, so it is unlikely to be of much use if you are running HotCRP in the cloud, as is typical nowadays. https://github.com/nc2y/conflict_authors

Babak Falsafi's scripts for COI (and more) for ISCA '18 can be found at https://github.com/mdrumond/pc-chair-kit.

Additional Toolkits and Resources

There are several repos that have tools that go beyond conflict management.

Aamer Jaleel's reviewer assignment assist tool was developed for MICRO '21 and used for HPCA '22. It was well received, is open source, and is available here: https://github.com/TheNetAdmin/MightyPC

The scripts used for ISCA '21 have been posted by Lizy John's student Bagus Hanindhito at https://github.com/hibagus/ISCA-2021-Script. There is a COI crosscheck script and PC meeting scheduler script. The COI crosscheck script is based on the ISCA'18 scripts by Mario Drumond and Mark Sutherland. It uses DBLP to generate a co-authors list and crosschecks against the collaborators entered by each PC member. The organizers simplified the script workflow and reduced manual work by requiring only PC Info data from HotCRP. The script is able to prepare a HotCRP-compatible CSV file to update the Collaborators List for each PC member. The PC meeting scheduler script is based on ASPLOS-'21 scripts by Emery Berger. The script schedules a discussion window for each paper based on PC availability and generates Zoom Breakout Room configuration based on COIs.

Babak Falsafi and his students Mario Drumond and Mark Sutherland's tools from ISCA '18 are at https://github.com/mdrumond/pc-chair-kit and include a useful review crawler script (originally from Moin Qureshi).

Emery Berger's tools from OSDI '21 are at https://github.com/emeryberger/PC-Resources In this repo, paper_affinity.py is useful in identifying non-conflicted experts for a paper (based on the number of citations in the paper for a particular PC/ERC member).

You can find historical conference acceptance stats for architecture conferences here.

Additional Notes and Guidance

There is no limit on the number of accepted papers authored by a PC member. This policy was approved by the SIGARCH EC based on feedback from the membership at the SIGARCH/TCCA business meeting at ISCA'16 and feedback from previous program chairs. The guideline is also approved by IEEE TCCA and applies to the ISCA conference.