

ACM SIGDA TC-FPGA Hall of Fame FPGA and Reconfigurable Computing

Goal Ongoing and sustainable mechanism to recognize most significant contributions to the field of FPGAs and Reconfigurable Computing

Basics

- **Eligibility for consideration:** papers published at least 10 years ago in any peer-reviewed conference or journal
- **Nominations:** accept public nominations through end of August (first year: 1 week after FPL)
- **Number:** induct up to 6 papers each year (see intent and notes below)
- **Selection:** 20-member selection committee casts ballots. Each committee member given 3 votes to cast. Top 6 receiving at least 10 votes are selected. (see intent and notes below)
- **Induction:** announced early January; induction annually at an F-conference of the honoree's choosing (F-conferences: FPGA, FCCM, FPL, FPT)

Time Frame Induct the first class for 2017 (allowing honors at 25th FPGA and FCCM). That means running the process for the first class before that. So, we should be able to announce the process and begin nomination at FPGA 2016.

Initializing Hall-of-Fame

For each paper selected for FPGA20, FCCM20, and FPL25 that meets the 10 year requirement (published 2007 or earlier), the Hall-of-Fame will either include that paper or the subsequent journal paper. The first-year selection committee will sort out which papers should be recognized as the journal article rather than the conference paper. If the paper is 10 years old, but the journal is younger, we will take the date of the conference paper for establishing the 10 year minimum requirement.

Selection Committee

Composed of 20 individuals who already have papers recognized in the Hall-of-Fame. For the sake of the first-year, papers meeting the 10 year requirement are effectively considered Hall-of-Fame papers. Committee members serve 4-year committee terms, with the terms staggered so that 5 new members rotate on and 5 old members rotate off each year. After serving a 4-year term, an individual is not eligible to rejoin the committee for 4 years.

The chair for a year selects the incoming committee members for that year from among those eligible. The chair is encouraged to consult with the existing committee to identify the potential new members to invite.

Committee members should be selected to keep the committee balanced across regions (e.g., North America, Europe, Asia) and specialization areas (e.g., architecture, tools, applications, circuits and technology).

Non-Conflict Papers from members of the selection committee are not eligible for consideration. Since this is an ongoing effort and members rotate off after 4 years, the only impact is that a paper's induction may be delayed by (up to) 4 years.

For the first year, we should pay attention to this in selecting the initial selection committee and perhaps the shortened terms for a few members of the initial selection committee. Not being invited for the initial selection committee may be a sign of respect that ones papers should be strong contenders for early induction into the Hall-of-Fame.

Chair The chair is elected to a one-year term by the selection committee, at the end of the year, from among the members that have served for two years. This guarantees that the incoming chair has seen how the committee and previous chairs operate. It also has the effect of limiting the maximum term of a chair to two years.

Chair selection is done at the end of a selection-committee year for the next year. All committee members, including outgoing committee members vote for the new chair. The new chair selects the incoming members for the next year.

To start the process, the chair for the first year will be selected by TCFPGA. The committee for the first year will be proposed to and approved by TCFPGA.

Publicity

Award Honorees get a certificate, recognition on a hall-of-fame web page, and associated bragging rights. There is no current plan for any monetary award. A member of the selection committee will present the award at the author's selected venue.

Press Release Plan to make a press release of selection at the beginning of each calendar year.

Recognition and Conferences The selected venue conference will honor the awardees. We will need to get cooperation from the appropriate general-chairs to schedule in the award. One observation is that the conference could use the induction of an honored paper as part of their publicity. A conference may even choose to include a short acceptance speech (or, potentially, even a keynote talk) by the authors as part of their program.

There is no intent to prevent honoring awardees at non F-conferences, but we may not have the connections to guarantee an arbitrary conference will cooperate.

Notes on Intentions

Venues The intent here is to cover “all” reasonable conference and journal venues, and we use the “peer-reviewed” requirement to capture that. In addition to the F-conferences and associated journals, this allows us to include papers in other key venues, such as DAC, ICCAD, CICC, ISCA, SuperComputing, JSSC, TRCAD, TRVLSI, TODAES, and JETC.

Nomination Date The August 31st deadline is designed to not interfere directly with the ISFPGA conference paper deadline, but allow the committee time to make decisions by the end of the calendar year. This also provides an opportunity for the selection committee to meet as a sidebar to the ISFPGA program committee conference if they deem it appropriate. Selection by the end of the year allows inductees to be honored at any of the conferences during the year, including ISFPGA which is typically the earliest.

For the first year, we will keep nominations open until one week after FPL to allow a final advertisement and nominations from the FPL community.

Nomination Process Take nominations on public website like FPGA20, FCCM20 (with suitable updating of technology).

Number to Induct per Year (N) The goal is for the Hall-of-Fame to include roughly the best 1% of papers published in the area of FPGAs and Reconfigurable Computing. If we knew the number of papers being published, an exclusiveness rate would determine the steady-state number we should be inducting. The number of relevant papers is probably fuzzy—while we can get a clear number from the F-conferences and F-journals, the number in other venues will vary and be somewhat subjective. Furthermore, this likely changes over time—ideally it grows as more people see the value of this field. Looking at the current F-conferences, we’re probably looking at around 125/year from FPGA (25), FCCM (25), FPT (25), FPL (50). Even these vary depending on mix of short papers. Other conferences (e.g., ARC, RAW, ReConFig, ...) will add more. TRETs adds another 25, IJRC 20. Then there are papers in DAC, ISCA, ISCAS, ANCS, and TCAD, TVLSI, TNS, TODAES, ... So, we’re probably looking at 250–300 papers a year. If we called it 300 and targeted 1%, we would have 3 per year. However, we are starting with a backlog of almost 30 years of papers not in the F-conferences (and hence potentially included in FPGA20, FCCM20, FPL20), so we will need to induct more than 3/year to handle the backlog.

Since the volume of papers changes over time, we should expect this number to need periodic revision. The hall-of-fame committee should monitor and propose adjustments to TCFPGA.

Votes and Counts The idea is that any paper should receive a plurality of support to be in the Hall-of-Fame, so we set the threshold, C , at half the committee size, P ($C=P/2$). We set V , the votes per committee member, to half the maximum number of inductees, N , so that we guarantee we won’t have more than N things above C ($P*V$ votes cast, if everything gets minimal $P/2$, we have $P*V/(P/2)=2V$ things getting over C votes). This formula probably also guarantees we seldom get all N .

If there are too many nominees in a year to reasonably handle the selection with a single round of balloting, the chair may institute further process steps to determine the contents of the final ballot. This may include prior rounds of balloting to eliminate nominations that are not strong contenders.

We expect this formula and methodology will need fine tuning. We encourage the committee and chair to monitor the process and fine tune. For large revisions, make a proposal back to the TCFPGA for approval.