



# Recruiting a Star Team

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*Ninety percent of your work's outcome will depend on the team you select to work with.*

**THIS WAS THE WISE ADVICE** of a colleague when I started serving at a position unquestionably more stressful than that of *IEEE Software* editor in chief. It turned out he was one hundred percent right. This experience allowed me to propose an ambitious plan for my term at *Software*,

a team of 40 new regular volunteers and almost 100 potential reviewers.

Two risks in a recruitment exercise are getting too few or too many applications. We countered the first risk by spreading our bets regarding the dissemination of our call for volunteers. We were able to gather interesting data regarding the effectiveness of the channels we used, thanks both to the distinct URLs we used to advertise the call and to

through the magazine's boards, and 15 each through personal contacts and LinkedIn.

Unfortunately, according to Google Analytics, almost all clicks came from North America, Brazil, or Europe, with only four Twitter-originating ones coming from India. No clicks appeared to come from other parts of the world. Also worryingly, only two applicants wrote that they found the call through the magazine's January column, where it was advertised. In all, we had 139 responses, most of them from highly accomplished, competent colleagues. This demonstrated how much our community values *Software* and is willing to contribute by lending a hand.

We countered the risk of getting swamped by too many applications by gathering the responses through a Google form with fields that helped us narrow down the most promising applicants. We collected these into a huge spreadsheet, which we could easily process and share among the magazine's boards. Most applicants seemed to have significant visibility on the Web, with a highly uneven distribution of preferred presence.

Of the 136 unique applications, 109 submitted a personal webpage,

On balance, an open process is considerably better than basing the recruitment on personal contacts.

knowing that I could deliver a large part of it by recruiting and working with a considerably expanded team of dedicated volunteers. By the time you read these lines, such a team will be in place. To promote openness in how *Software* is managed and to help those who want to undertake a similar exercise, here's how we gathered 139 applications and recruited

a form field asking, "How did you hear about this call?"

By far, the winner was the SEWorld mailing list, which generated 455 clicks to the form (see [http://goo.gl/#analytics/goo.gl/zAKuaa/all\\_time](http://goo.gl/#analytics/goo.gl/zAKuaa/all_time)). The other channels generated an order of magnitude fewer clicks: 90 through the @ieeesoftware Twitter account, 40

TABLE 1

The number of applications and corresponding appointments for the various responsibilities.

| Responsibility                           | No. of applications | No. of appointments |
|--|---------------------|---------------------|
| Area associate editor                    | 121                 | 10                  |
| Reviewing                                | 97                  | 97                  |
| Conference reports and articles          | 54                  | 1                   |
| Theme issues                             | 54                  | 1                   |
| Invited content                          | 46                  | 3                   |
| Member at large                          | 36                  | 4                   |
| Specific conference correspondent        | 32                  | 15                  |
| Departments                              | 31                  | 1                   |
| Practitioner–academic pairing initiative | 30                  | 0                   |
| Translations                             | 28                  | 6                   |
| Metrics                                  | 23                  | 3                   |
| Software blog                            | 23                  | 1                   |
| Awards                                   | 20                  | 1                   |
| Software Experts Summit                  | 18                  | 1                   |
| Constituency ambassador                  | 14                  | 6                   |
| Department editor                        | 12                  | 3 (invitations)     |
| Newsletter                               | 12                  | 1                   |
| Online presence and engagement           | 12                  | 1                   |
| Social network or community ambassador   | 11                  | 3                   |
| Constituency ambassador manager          | 10                  | 1                   |
| IEEE Computer Society project liaison    | 10                  | 0                   |

19 a ResearcherID, 40 an ORCID, about 100 a DBLP URL (I manually completed a few more), 93 a LinkedIn profile page, 8 a Stack-Overflow ID, and 24 a GitHub ID. Most applicants (115—that is, 83 percent) identified themselves as researchers, with another 15 (11 percent) as practitioners, and 4 as consultants. In total, the 136 applicants volunteered for 1,470 positions.

Table 1 shows the number of applications received for each position and the corresponding number of appointments.

We based the shortlisting of applicants on several factors. To provide input for the editorial board positions, which require publishing experience and contact with a large network of researchers, I wrote a simple Google Apps script that,

given a DBLP URL, would fetch the corresponding author’s publications as XML and return the number of publications and coauthors. In total, our applicants featured 5,605 publications and 5,212 coauthors.

Existing board members were given 30 endorsement votes, and were asked to distribute them (together with any objection points) among the applicants, by filling in a spreadsheet column for each applicant. To avoid bandwagon effects, we set the text color in that area to white so that no one could unintentionally see how the others had voted. Through this process, 162 points were awarded through 66 endorsements.

Other elements we examined for shortlisting the candidates included their CV, their current professional position, their last academic degree, a practitioner inclination, and affiliation with a community or area we deemed strategically important for *Software*. The LinkedIn URL proved particularly useful for quickly obtaining a standardized overview of each candidate. On the basis of these criteria, we graded the candidates on a three-point scale and ranked them. In all, 56 candidates were shortlisted.


If you’re into algorithms, you’ll realize that the optimal allocation of candidates to positions is an interesting problem. We sidestepped the “interesting” part through a simple heuristic. The most highly ranked candidates received the most sought-after positions, with other candidates filling the remaining ones. Then, we swapped some positions among candidates to increase the number of ones that could be filled. Sadly, some applicants volunteered for very few positions, which resulted in 11 shortlisted candidates not getting invited to contribute owing to the lack of a suitable matching position.

I readily admit that this selection process isn't perfect. Given the large volume of entries that are processed with the help of IT shortcuts, it can miss a star applicant owing to an imperfectly completed form. It can also allow in a toxic individual with an impressive CV. However, I've seen that on balance, such an open process is considerably better than basing the recruitment on personal contacts, especially if you're willing to tolerate the cost of a few inevitable failures and make a few hard decisions farther down the road to correct initial missteps.<sup>1</sup>

The last part of the selection involved fine-tuning the results with the magazine's advisory board chair, Ipek Ozkaya, and lead editor, Brian Brannon. Both expressed concern regarding the resulting boards' potential size. To address, this we instituted *Software* initiative teams to cover the blog, newsletter, conference report, translation, and constituency ambassador positions, and set up a layered structure for managing the corresponding initiatives.

Finally, IT automation aided communicating the results back to the applicants. Another Google Apps script used the position, role,

and other fields associated with each candidate to generate an email containing the result of the process, the reference terms associated with the position, and, in some cases, a request for additional details. We sent more than 400 emails (including copied messages) in this way.

**I**'ll present an overview of the new composition of the *Software* boards and initiative teams in our next issue. However, if you're impatient, you can see them at <http://computer.org/software>. 

#### Reference

1. D. Spinellis, "Against the Odds: Managing the Unmanageable [sic] in a Time of Crisis," *Advanced Information Systems Eng.*, LNCS 8484, Springer, 2014, pp. 24–41; doi:10.1007/978-3-319-07881-6\_3.

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