



# A high-impact and expeditious journal for computational and algorithmic computer science research

## 1 | JOURNALS ARE SLOW

“Publish or perish”: but where to publish your paper? You worked hard on the research and wrote a fine piece. In some fields, monographs are the preferred format; in others, journals; and in computer science (CS), conferences are often preferred for their speed of publication (Chang et al., 2016). But which book publisher, journal, or conference?

The San Francisco Declaration on Research Assessment (DORA, 2012) emphasizes paper-level metrics over venue-level metrics. Signatories to the declaration, such as the Dutch Research Council (NWO), say that work should be judged on its own merits, not on the reputation of the journal or conference in which it appears. Nonetheless, the choice of venue is critical in dissemination of quality research. There are many journals and many conferences; some reputable, some not.

Research published in *Computer-Aided Civil and Infrastructure Engineering* (CACAIE) tends to score well on paper-level metrics (Wang et al., 2020). Before I explain why we chose to submit a CS application paper to CACAIE, we need some context.

In CS as a rule, conferences are preferred over journals when first publishing a work. While this current de facto is not without debate (Vardi, 2009, 2020, 2021), the leading reason is that a conference peer-review cycle takes a few months, and your work (if accepted) appears within half a year of submission or less. Journals, by contrast, traditionally take a year or more to complete their reviewing process, and your work can appear several years after submission. As a famous example of the tardiness of journals, see the experience related by Chang et al. (2016).

In the 21st century, journals are aware of the need for more expeditious review and publishing. As we discovered, a visionary leader among “traditional” journals is CACAIE.

## 2 | CACAIE IS FAST AND THOROUGH

In terms of ratings, the journal CACAIE is at the top of the charts. In 2020 metrics, one-year impact factor 11.775, ranked number one in three engineering fields, and number two (of 112 journals) in “Computer Science Inter-Disciplinary Applications.”

Is this stellar position an artifact of the broken metric-based system which DORA critiques—or is there a basis in terms of the quality of the work published in the journal, attracted by the quality of the publication process and the management of the journal and its Editor-in-Chief?

In March 2021, I submitted a paper to CACAIE. The policy of my institution, TU Delft, is that publications are to be open access by default. The Dutch universities have agreements with publishers. My co-authors and I chose CACAIE for a number of reasons, including fit of topics, reputation for rapid review process, and that the paper, if accepted, would be gold open access with the publication charge covered by this agreement (NWO, 2020).

The paper received six reviews within three weeks. *Six reviews*. Only once, at the prestigious AAAI conference, did I receive six reviews on a paper (and that because the Program Chairs wanted two further opinions on the submission). But for a journal, usually two or three reviews. And CACAIE’s reviews within *three weeks*. A top CS conference takes typically eight weeks for first-round reviews. And these were *thoughtful reviews*. The reviewers had digested the paper. Their feedback was structured by the CACAIE review form, and it was on the ball.

There followed two rounds of revisions with timely reviews. The paper was accepted in August, and appeared online in “Early View” prepublication within two weeks: six months from start to finish. Outstanding for a rigorous five (or more!) review journal. And, notably, review quality was not compromised at the cost of speed.

I must highlight the CACAIE editorial process. CS venues such as AAAI process papers through rather



anonymous editorial systems. CACAIE's process was not less professional but was much more personal: hands-on email correspondence by the Editor-in-Chief. This was refreshing and felt more human. Moreover the Editor-in-Chief, not an Associate Editor (see Adeli, 2007), was very much involved in the entire three rounds of reviews.

### 3 | A BRIGHT FUTURE

Does the future look bright for CACAIE, a journal celebrating more than 35 years and currently topping the charts (Yang, 2020)?

On present course—with a visionary Editor-in-Chief, a strong focus, no-nonsense author guidelines, a fast and quality review process, and open access options—CACAIE looks set to continue its stellar position of publishing influential work.

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