#### **Editorial**

# Introducing The Art, Science, and Engineering of Programming

## An Open Access Journal for All-Things Programming

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The Art, Science, and Engineering of Programming is a new journal created with the goal of placing the wonderful art of programming in the map of scholarly works. Many academic journals and conferences exist that publish research related to programming, starting with programming languages, software engineering, and expanding to the whole Computer Science field. Yet, many of us feel that, as the field of Computer Science expanded, programming, in itself, has been neglected to a secondary role not worthy of scholarly attention. However, much of the progress in Computer Science lies on the basis of computer programs, the people who write them, and the concepts and tools available to them to express their ideas.

The Art, Science, and Engineering of Programming focuses primarily on programming: the art itself (programming styles, pearls, models, languages), the emerging science of understanding what works and what doesn't work in general and in specific contexts, as well as more established engineering and mathematical perspectives.

#### Highlights

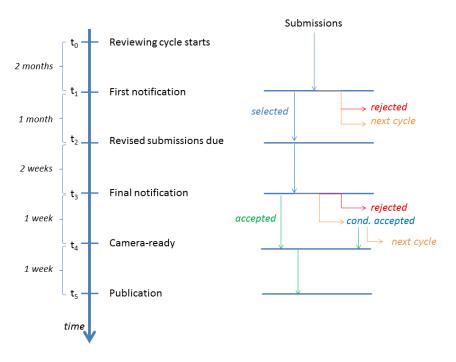
- Gold open access, free-of-charge to authors. The articles are accessible to everyone, forever, and the authors do not need to pay any fee. We are able to do this because everyone involved in the operation of this journal does it on a voluntary, unpaid basis, and also because the journal's owner, the non-profit AOSA, is able to cover the remaining operating costs.
- All articles are published under a Creative Commons license.
- The journal is an overlay on arXiv, meaning that we upload all articles to arXiv as a long-term storage system and mirror it on other servers.
- Papers can be submitted at any time, but submissions are batched and processed in cycles with strict deadlines for reviewers, authors, and editors. We start with three cycles per year, but may consider increasing it in the future.
- The reviewing process is designed to take four months between the the start of the reviewing cycles and publication.
- Authors of papers accepted for publication in the journal are expected to present their work at the next Programming conference that is held every year around April. The first instance of this conference will be in Brussels on April 3–6, 2017.

# The Art, Science, and Engineering of Programming

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■ **Figure 1** Peer review cycle.

#### **Peer Review Process**

All articles go through a peer review process that is designed to be both efficient and of high quality and that runs in cycles. An illustration is shown in figure 1.

In each cycle, a first round of review results in the selection of a subset of the articles that are considered to be (a) important, (b) properly grounded, (c) clearly written, and whose weaknesses identified by the reviewers can be addressed by the authors within one month. All other submissions are either rejected at that point or recommended to pass on to the next cycle (this latter option can only happen at most once for each article submitted to the Journal).

Revised submissions of the articles selected in the first round of review in each cycle are expected to be received within one month of the first notification. Once received, the same reviewers perform a second review of the articles, to verify that the requested revisions were effectively addressed by the authors. At that point, final decisions are made about whether to accept the articles for publication or not. Submissions that still fall short of what was requested are either rejected or conditionally accepted pending one more, very short, final revision by the authors. Depending on the nature of the remaining issues, publication of these conditionally accepted articles may be postponed to the next issue of the Journal.

#### **Copy-Editing by the Authors**

To keep the costs to a minimum and to ensure short processing cycles, the Journal does not provide copy-editing services beyond remarks made by the reviewers. It is up to the authors to ensure that the articles are written using high standards of the English language, possibly by contracting professional copy editors before submitting

the articles for review. Articles that fall under a certain quality bar may be rejected upon initial submission and therefore without review.

### **Copyright Stays with the Authors**

The Journal requires neither copyright transfers from the authors nor exclusive distribution rights. All rights and responsibilities remain with the authors of the articles. The only requirement for publication at the Journal is that the authors of accepted articles make them available using one of the Creative Commons licenses, which then allows us to distribute the articles.

Additionally, we expect all authors of published articles to honor the basics of good scholarly conduct, such as not publishing the same article or an article with considerable overlap in different journals or publication venues as if they are different, and not changing the article after publication in the Journal without consulting an editor of the Journal. This does not pertain to legal matters of Copyright, since the authors retain it; it pertains to standards of conduct in scholarly communities.

#### Relation to the (Programming) Conference

The Journal is published by AOSA, a non-profit organization dedicated to the advancement of software technologies through the publication and dissemination of research work. Parallel to the Journal, this organization also organizes an annual conference called 'Programming'. The Journal and the conference are independent initiatives, with separate governance. The conference includes several networking events, invited talks, and the presentation of peer-reviewed and non-peer-reviewed work and work in progress.

In order to help disseminate the work described in the articles published in the Journal, authors of accepted papers are expected to present their work at next deprogramming conference that follows the publication of the articles. In the future, we may also consider other conferences as the venues of these presentations. These presentations are part of one special track of the conference(s), clearly marked as pertaining to the research articles pulished in the Journal over the previous year. These talks may be recorded and/or broadcast live.

#### **Open Access**

We are part of a growing number of researchers and academics who believe that research publications, especially those supported by public funds, should be freely available to everyone, and not locked behind commercial paywalls. We also believe that for-profit publishers and many not-for-profit commercial publishers have been abusing the good will of researchers, who volunteer enormous amounts of their time to review their peers' work and mentor the next generation of researchers, free of charge. Because so much of what makes scholarship work is done on a volunteer basis, we believe Open Access fees should be kept to a minimum, or waved altogether, with publication costs covered by some other means.

In the case of this Journal, AOSA covers all remaining publication costs, such as the registration of the Journal as a serial, DOIs, and the peer review management system. Funding for this is made possible by other revenue streams of AOSA, namely proceeds from the 'Programming' conference.

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