



## Philosophy & Technology

Editor-in-Chief: Luciano Floridi (Oxford)

The journal addresses the expanding scope and unprecedented impact of technologies, in order to improve the critical understanding of the conceptual nature and practical consequences, and hence provide the conceptual foundations for their fruitful and sustainable developments. The journal welcomes high-quality submissions, regardless of the tradition, school of thought or disciplinary background from which they derive.

Call for Papers for Philosophy and Technology's special issue on *Computing and programming in context – The interplay between logic, science, technology and society*

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### INTRODUCTION

In a society where computers have become ubiquitous, it is necessary to develop a broader understanding of the nature of computing and programming, not just from a technical viewpoint, but also from a historical and philosophical perspective. Computers and computer programs do not exist in a vacuum – they are a part of a rich socio-technological context that provides ways for understanding computers and reasoning about programs (cognitive sciences and logic), they are made of technology that shapes the nature of computing and programming. Computers and programs also influence our understanding of the world (e.g. as a scientific instrument) or our relationship with the world (i.e. their sociological and psychological effects).

The aim of this special issue is to bring together works exploring computing and programming across their rich socio-technological, scientific and formal context. We are convinced that an interdisciplinary approach is necessary for understanding computing and programming in their multifaceted nature. As such, we welcome interdisciplinary submissions by researchers coming from a diversity of backgrounds, including historians, philosophers and computer scientists.

Questions that consider computing and programming in a wider context include, for example:

- What formal, societal and technological influences contributed to the way in which modern programs are written and modern computers are constructed?
- In what ways can computer programs lead to novel phenomenological experiences, be it through direct engagement with technological artifacts or as mediated through art?
- What is the role of programs and computer simulations in traditional sciences such as biology and physics?

This special issue follows two recent events organised by the Commission for the History and Philosophy of Computing – the Fourth Conference on the History and Philosophy of Computing (HaPoC, Brno, October 2017) and the Fourth Symposium on the History and Philosophy of Programming (HaPoP, Oxford, April 2018). This call is open both to authors of contributions to HaPoC and HaPoP who are encouraged to submit a full paper based on their presentations, and to submissions not presented at the aforementioned conferences.

## TOPICS

This Call for Papers invites work that contributes to philosophy of technology by engaging with questions that arise when we consider computing and programming in a wider context. This includes, but is not limited to the interplay between computing or programming and:

- Mathematics and formal logics – What role have mathematics and formal logics played in the history of computing and programming? What is the nature of the relationship between computer programs or technical computing artifacts and their formal models?
- Sciences – Does computing and programming provide qualitatively new methods in sciences such as physics or biology? What can we learn by tracing the interaction between computing and scientific knowledge through the history?
- Technology – In what ways have technological innovations enabled developments in computing and programming? What is the nature of the technological artifacts used in computing and how does it differ from other areas of technology?
- Society – What are the societal implications of computing and programming? How are developments in computing interlinked with activities of professional organisations or businesses? How does programming contribute to disciplines outside of a narrow business programming context in areas such as art?

## TIMETABLE

1 June 2018	First Call for Papers
1 August	Second Call for Paper
1 October 2018	Deadline papers submissions
1 January 2019	Deadline reviews papers
1 March 2019	Deadline revised papers
2019	Publication of the special issue

## SUBMISSION DETAILS

To submit a paper for this special issue, authors should go to the journal's Editorial Manager <http://www.editorialmanager.com/phte/>

The author (or a corresponding author for each submission in case of co-authored papers) must register into EM.

The author must then select the special article type: "COMPUTING AND PROGRAMMING IN CONTEXT" from the selection provided in the submission process. This is needed in order to assign the submissions to the Guest Editors.

Submissions will then be assessed according to the following procedure:

New Submission => Journal Editorial Office => Guest Editor(s) => Reviewers => Reviewers' Recommendations => Guest Editor(s)' Recommendation => Editor-in-Chief's Final Decision => Author Notification of the Decision.

The process will be reiterated in case of requests for revisions.