Call for Papers Second Symposium on History and Philosophy of Programming www.computing-conference.ugent.be/hapop2

At AISB-50, Goldsmiths, London 1-4, April 2014

As part of the AISB-50 Annual Convention 2014 to be held at Goldsmiths, University of London, on April 1st-4th 2014

www.aisb.org.uk/events/aisb14

The convention is organised by the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB)

http://www.aisb.org.uk/.

Overview

The history and philosophy of computing only started to develop as real disciplines in the '80s and '90s of the previous century, with the foundation of journals (e.g. the IEEE Annals on the History of Computing, Minds and Machines and the like) and associations (SIGCIS, IACAP, . . .), and the organization of conferences and workshops on a regular basis. A historical awareness of the evolution of computing not only helps to clarify the complex structure of the computing sciences, but it also provides an insight in what computing was, is and maybe could be in the future. Philosophy, on the other hand, helps to tackle some of the fundamental problems of computing. The aim of this symposium is to zoom into one fundamental aspect of computing, that is the foundational and the historical problems and developments related to the science of programming.

This is the Second Symposium on History and Philosophy of Programming, following the first edition organized in 2012 at the AISB/IACAP Joint Convention in Birmingham, UK. It is supported by the Commission on the History and Philosophy of Computing (http://www.hapoc.ugent.be/home).

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Topics of Interest

That a logico-mathematical-physical object called program is so controversial, even though its very nature is mostly hidden away, is rooted in the range of problems, processes and objects that can be solved, simulated, approximated and generated by way of its execution. Given its widespread impact on our lives, it becomes a responsibility of the philosopher and the historian to study the science of programming. The historical and philosophical reflection on the science of programming is the main topic at the core of this workshop and we expect contributions (talks) in the following aspects (and their connections):

- 1. The history of computational systems, machines and programs
- 2. Foundational issues and paradigms of programming
- 3. Methodology of designing, teaching and learning programming

We believe the scientific community needs a deep understanding and critical view of the problems related to the scientific paradigm represented by the science of programming. Possible and in no way exclusive questions that might be of relevance to this Symposium are:

- What was and is the relation between hardware and software developments?
- How did the notion of 'program' changed since the 40s?
- How important has been the hands-off vs. the hands-on approach for the development of programming?
- How did models of computability like Church's lambda-calculus influence the development of programming languages?
- Is programming a science or a technology?
- What are the novel and most interesting approaches to the design of programs?
- What is correctness for a program? Issues in Type-checking, Model-checking, etc.

- \bullet How do we understand programs as syntactical-semantical objects?
- What is the nature of the relation between algorithms and programs? What is a program?
- How can epistemology profit from the understanding of programs' behavior and structure?
- What legal and socio-economical issues are involved in the creation, patenting or free-distribution of programs?
- How is programming to be taught?

Submission and Publication Details

Submissions must be full (short) papers and should be sent via EasyChair:

https://www.easychair.org/conferences/?conf=hapop2

Text editor templates from a previous convention can be found at:

http://www.aisb.org.uk/convention/aisb08/download.html

We request that submitted papers are limited to eight pages. Each paper will receive at least two reviews. Selected papers will be published in the general proceedings of the AISB Convention, with the proviso that at least ONE author attends the symposium in order to present the paper and participate in general symposium activities.

Important Dates

Full paper submission deadline: 3 January 2014

Notification of acceptance/rejections: 6 February 2014

Final version of accepted papers: 24 february 2014

Convention: 1-4 April 2014 (confirmation of symposium date tbc)

Additional Information

Please note that there will be separate proceedings for each symposium, produced before the convention. Each delegate will receive a memory stick containing the proceedings of all the symposia. In previous years there have been awards for the best student paper, and limited student bursaries. These details will be circulated as and when they become available. Authors of a selection of the best papers will be invited to submit an extended version of the work to a journal special issue.

Symposium organisers

dr. Liesbeth De Mol elizabeth.demol@ugent.be UMR 8163 Savoir, Textes, Languages Université de Lille 3 Bt.B4 Rue du Barreau BP 60149 59653 Villeneuve d'Ascq Cedex, France

dr. Giuseppe Primiero
G.Primiero@mdx.ac.uk
website: http://www.cs.mdx.ac.uk/people/giuseppe-primiero/
Department of Computer Science
Middlesex University
the Borroughs
NW4 4BT, London, UK

Symposium Website:

www.computing-conference.ugent.be/hapop2

Programme Committee

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