

Instructions for contributors

Editorial policy

Mathematical Structures in Computer Science (MSCS) is a journal of theoretical computer science which focuses on the application of ideas from the structural side of mathematics and mathematical logic to computer science. The journal aims to bridge the gap between theoretical contributions and software design, publishing original papers or broad surveys with original perspectives in all areas of computing, provided that ideas or results from logic, algebra, geometry, category theory or other areas of logic and mathematics form a basis for the work. The journal also welcomes applications to computing based on the use of specific mathematical structures (e.g. topological and order-theoretic structures) as well as on proof-theoretic notions or results. In addition, it is interested in contributions in new interdisciplinary fields bridging computer science, quantum physics, mathematics and information theory. In particular, papers on mathematical formalisms for quantum computation, quantum information processing and communication will be considered.

The journal will also consider papers on computational modelling of epigenetic phenomena, protein-protein interactions, stochasticity in molecular cascades. Mathematical approaches to System Biology will be welcomed, within the broad framework of post-genomic views of embryogenesis and evolution.

The purpose of the journal is to increase the circulation of new very high standard results in fast growing areas which are currently influencing various aspects of actual computing. Indeed, this journal is not meant to be only a 'theory journal' but, by choosing as a theme the use of mathematical methods of Computer Science independently of their area of application, it aims to highlight connections among different topics and to encourage applications of theoretical contributions.

In order to promote the use of mathematical methods in computer science, expository and introductory papers are welcome, provided that there is a clear connection to computational issues or they investigate mathematical structures whose relevance to computer science is well established. However, these contributions should be directed to the broad audience of computer scientists to which this journal is addressed. Equally, discussions of a methodological or philosophical nature concerning the foundation of Computer Science are of interest for the journal.

Submission of manuscripts

Papers may be submitted to any member of the Editorial Board. A file .pdf should be sent accompanied by the author's address, telephone and fax number, and e-mail address.

A copy of the paper together with the name of the editor chosen should also be sent to the Editor-in-Chief who will record the submission.

Submission of a paper is taken to imply that it has not been previously published and that it is not being considered for publication elsewhere. Authors of articles published in the journal assign copyright to Cambridge University Press (with certain rights reserved) and you will receive a copyright assignment form for signature on acceptance of your paper.

The publisher encourages submission of papers written in LaTeX using the *MSCS* LaTeX style file. The LaTeX 2.09 style file *mcs.sty* together with a guide to its use *mcsguide.tex*, or the corresponding LaTeX 2e file *mcs.cls* are available via anonymous ftp from the Cambridge University Press site at <ftp.cup.cam.ac.uk> in the directories `/pub/texarchive/journals/latex/mcs-sty` or `/pub/texarchive/journals/latex/mcs-cls`. In the directory `/pub/texarchive/journals/latex/mcs-sty` you will find a concatenated file called *mcs.all*. This file contains *readme.txt*, *mcs.sty* and *mcsguid.tex*. If you Tex *mcsguid.tex* you will get a full set of instructions for using the style file. In case of difficulties obtaining these files, there is a help-line available via e-mail; please contact texsupport@techbooks.com. While use of the *MSCS* LaTeX style file is preferred, ordinary LaTeX or plain TeX files can also be accepted.

On final acceptance of their paper, authors should make accessible to the Editor-in-Chief (downloadable) the LaTeX source code including all figures (line figures only), a file .pdf and author-defined macro and style files, together with a hard copy produced using the same file. Discs should be in Apple Mac or PC format and will not be returned. The publisher reserves the right to typeset any article by conventional means if the author's TeX code presents problems in production.

Layout of manuscripts

Papers should be typewritten in **double spacing throughout**, on one side of the paper. Please avoid footnotes if possible. Papers should begin with an abstract of not more than 300 words and should end with a brief concluding section.

Illustrations

Figures should be drawn in indian ink on good quality white paper or produced by computer to comparable quality. Wherever possible they will be reproduced with the author's original lettering. Originals of figures should not be sent until the paper has been accepted. A list of captions should be attached separately.

References

The Harvard system of references should be used. In the text, a reference should be quoted by the author's name and date in parentheses, in date order, e.g. (Smith 1983; Jones and Jones 1985; Hunter 1986a,b). Where there are three or more authors, the first name followed by et al. should be used. A full list of references should be given at the end of the main text, listing, in alphabetical order, surname of author and initials; year of publication (in parentheses); article title; journal name abbreviated in accordance with the *World List of Scientific Periodicals* (4th edn); volume number; inclusive page numbers. For books and conference proceedings, place of publication and publisher (and Editor(s) if appropriate) should be included.

Proof Reading

Typographical or factual errors only may be changed at proof stage. The publisher reserves the right to charge authors for correction of non-typographical errors. No page charge is made.

Offprints

Extra offprints may be purchased from the publisher if ordered at proof stage.

© Cambridge University Press 2011

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE

The Pitt Building, Trumpington Street, Cambridge CB2 1RP, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 8RU, United Kingdom

32 Avenue of the Americas, New York, NY 10013-2473, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

C/Orense, 4, planta 13, 28020 Madrid, Spain

Lower Ground Floor, Nautica Building, The Water Club, Beach Road, Granger Bay, 8005 Cape Town, South Africa



MSCS

JUNE 2011 VOLUME 21 NUMBER 3

CONTENTS

- Choquet–Kendall–Matheron theorems for non-Hausdorff spaces 511
JEAN GOUBAULT-LARRECQ AND KLAUS KEIMEL
- A system of interaction and structure V: the exponentials and splitting 563
ALESSIO GUGLIELMI AND LUTZ STRÄBBURGER
- The representational adequacy of HYBRID 585
R. L. CROLE
- Domains occur among spaces as strict algebras among lax 647
RORY B. B. LUCYSHYN-WRIGHT

© Cambridge University Press 2011

Cambridge Journals Online

For further information about this journal
please go to the journal website at:
journals.cambridge.org/msc



Mixed Sources

Product group from well-managed
forests and other controlled sources
www.fsc.org Cert no. SA-COC-1527
© 1996 Forest Stewardship Council

CAMBRIDGE
UNIVERSITY PRESS