

Report of Committee on Implementation of Transactions Supplements

Helmut Bölcskei
Gerhard Kramer
Frank Kschischang
Alon Orlitsky
Alexander Vardy
Sergio Verdú

IT Society Board of Governors Meeting
Honolulu, HI
June 29, 2014

Committee Charge

By an email vote conducted in mid-February, 2014, the Board of Governors passed the motion:

“to allow for peer-reviewed online-only **supplementary material** to be posted together on Xplore with each IT Transactions paper.”

An ad-hoc committee was formed in March “to work out the details, included recommended page limit on papers, possible page charges above some page limit, as well as all implementation details.”¹

- The committee interacted via email.
- Additionally, Frank Kschischang met with IEEE staff at the March 2014 Panel of Editors meeting in Chicago, in particular with Dawn Melley, Director of Editorial Services, IEEE Periodicals.

¹Abbas El Gamal email, Feb. 12, 2014.

Existing Mechanisms within IEEE Xplore

- IEEE **does** currently support posting of supplementary material. The present interface appears aimed at supporting the posting of supplementary multimedia files.
- The supplementary material associated with a paper is available from the same IEEE Xplore page from which the paper can be downloaded.
- Current IEEE practice is to label supplementary material as “Multimedia;” we would need to work with IEEE to allow for a more general label such as “E-supplement.”

BROWSE ▾

MY SETTINGS ▾

MY PROJECTS

WHAT CAN I ACCESS?

RESOURCES ▾

SEARCH

Author Search | ^{beta} Advanced Search | Preferences | Search Tips | More Search Options ▾

Browse Journals & Magazines > Medical Imaging, IEEE Transac > Volume:31 Issue:9

◀ Prev | Back to Results | Next ▶

Image Reconstruction From Highly Undersampled (k, ℓ) -Space Data With Joint Partial Separability and Sparsity Constraints

Full Text as PDF

Click here

4
Author(s)

Bo Zhao ; Dept. of Electr. & Comput. Eng., Univ. of Illinois at Urbana-Champaign, Urbana, IL, USA ; Haldar, J.P. ; Christodoulou, A.G. ; Zhi-Pei Liang

Abstract

Authors

References

Cited By

Keywords

Metrics

Similar

Multimedia

Download Citations

Email

Print

Request Permissions

Save to Project

Partial separability (PS) and sparsity have been previously used to enable **reconstruction** of dynamic images from **undersampled** (k, ℓ) -space data. This paper presents a new method to use PS and sparsity constraints jointly for enhanced performance in this context. The proposed method combines the complementary advantages of PS and sparsity constraints using a unified formulation, achieving significantly better **reconstruction** performance than using either of these constraints individually. A globally convergent computational algorithm is described to efficiently solve the underlying optimization problem. **Reconstruction** results from simulated and in vivo cardiac MRI data are also shown to illustrate the performance of the proposed method.

Published in:

Medical Imaging, IEEE Transactions on (Volume:31, Issue: 9)

BROWSE ▾

MY SETTINGS ▾

MY PROJECTS

WHAT CAN I ACCESS?

RESOURCES ▾

SEARCH

Author Search ^{beta} | [Advanced Search](#) | [Preferences](#) | [Search Tips](#) | [More Search Options](#) ▾[Browse Journals & Magazines](#) > [Medical Imaging, IEEE Transac](#) > [Volume:31 Issue:9](#) 🔍[Prev](#) | [Back to Results](#) | [Next](#) >

Image Reconstruction From Highly Undersampled (k, ℓ) -Space Data With Joint Partial Separability and Sparsity Constraints

 Full Text as PDF4
Author(s)

Bo Zhao ; Dept. of Electr. & Comput. Eng., Univ. of Illinois at Urbana-Champaign, Urbana, IL, USA ; Haldar, J.P. ; Christodoulou, A.G. ; Zhi-Pei Liang

Abstract

Authors

References

Cited By

Keywords

Metrics

Similar

Multimedia



Download Citations



Email



Print



Request Permissions



Save to Project

Multimedia

File name: tmi-2203921-mm.zip

File size: 1



Download



Files may be compressed to optimize download experience. If you have any problems downloading, please review our [Multimedia FAQ](#).

If you have any problems downloading this object, please complete the [Online Technical Support Form](#)

Referencing the Supplement

The supplement can be referred to in the paper in several ways:

- 1 in the first-page footnote:

This paper has supplementary downloadable material available at <http://ieeexplore.ieee.org>, provided by the authors. This includes six multimedia AVI movie clips, . . .

- 2 as a footnote in the main body:

This paper has supplementary downloadable material available at <http://ieeexplore.ieee.org>, provided by the authors. This includes a set of Solaris C programs . . .

- 3 as a reference within a paragraph:

We have included a supplementary color MPEG file which contains four images taken under different conditions. This will be available at <http://ieeexplore.ieee.org>.

- 4 It is also possible to include a hyperlink (to a digital object identifier or DOI, which then maps to a URL) directly in the text.

Producing and Posting the Supplement

- IEEE will post the supplement on IEEE Xplore for free.
- Normally, authors take full responsibility for supplying the digital file; i.e., by default no processing by IEEE is performed on the supplementary material. In particular, this means that IEEE takes no responsibility for compatibility of posted material with future standards (e.g., updated versions of PDF).
- According to Dawn Melley, we *could* have IEEE format the supplementary material. (Presumably, IEEE would then take responsibility for version migration.) However, the production cost would be the same as to produce a paper. Specifically:
 - moderate editing at \$31.50 per page (this includes producing a PDF from XML-tagged content);
 - XML conversion at \$4.00 per 8K characters;
 - graphics conversion at \$3.00 per page.

Cost Reduction by Elimination of Print

We inquired with IEEE about cost savings achievable by going “all electronic,” eliminating printed copies. According to Dawn Melley,

If you were to eliminate print altogether, you would save about \$140K per year.

Supplements + Page Charges = Cost-savings?

The committee considered the possibility of imposing overlength page charges in conjunction with the posting of electronic supplements. For example,² imposing page charges when a paper exceeds 20, 18, or 16 pages might produce annual savings of about \$30K, \$50K, and \$75K, respectively, but would affect between 1/5 and 1/3 of all papers.

The consensus is:

- imposing overlength page charges is, for many reasons, undesirable;
- imposing such charges is not justified by the potential cost-savings.

²See the “Transitions” document from the February BoG meeting.

Committee Recommendation (1)

- 1 The committee recommends allowing for peer-reviewed online-only supplementary material to be posted on Xplore together with each IT Transactions paper, entirely at the authors' discretion.

Committee Recommendation (2)

- 2 The committee further recommends that Transactions authors be made aware that electronic publication of peer-reviewed supplementary material is now possible by posting the following in the *Information for Authors*:

Posting, in electronic form on IEEE Xplore, of supplementary material (e.g., detailed mathematical proofs, additional tables, figures, data, multimedia, computer code, etc.) associated with an accepted paper is now possible. Such posting of electronic supplements will be considered solely at the request of the author(s), provided that all supplementary material is submitted for review simultaneously with the manuscript. Electronic supplements will undergo review along with the submitted paper. All supplementary material must be referred to in the paper. Authors bear full responsibility for formatting and production of the supplementary material in a suitable file format. Authors should note that electronic supplements may have a non-archival status. That is, the IEEE does not warrant that such files will remain compatible with future read-back software in perpetuity. All materials must follow copyright guidelines and may not include material previously copyrighted by another author, organization, or company.

Communication with Editorial Board

- Posting of supplementary material will be done “*solely at the request of the author(s).*” There is no intent that posting of supplementary material be made mandatory at the request of, say, a reviewer or an Associate Editor.
- The Editor-in-Chief will work the Transactions Editorial Board so that AEs are made aware that the option to post supplementary material exists, but also to provide clarity so that the purpose of this option is not misconstrued.

Appendix: IEEE Visualization & Graphics Technical Committee

IEEE Computer Society Transactions accepts supplemental materials for review with regular paper submissions. Types of supplemental material can include: proofs, code, experimental data, short movies, appendices, animations, PDF with embedded multimedia and audio files. These materials may be published on our Digital Library with the electronic version of the paper, where they can be accessed for free.

If an appendix makes a manuscript exceed the page limit, you will be asked to designate the appendix as supplemental material. If the paper's appendix is not designated as supplemental material, you must reduce the paper in order to fit the page limit.

All materials must follow US copyright guidelines and may not include material previously copyrighted by another author, organization or company. Please see our guidelines below for file specifications and information. Any submitted materials that do not follow these specifications will not be accepted.

Appendix: J-MEMS Supplemental Material

Authors can now submit supplemental material together with their manuscripts. Examples are expansive data sets, illustrative movies and additional images, macros that exploit the special display capabilities of computers, code software for data analysis and simulation, as well as other enhancements that can help interested readers to appreciate and make use of the research described. Any available supplemental material is available to readers through a link placed adjacent to the IEEE Xplore entry for an accepted paper. A fuller discussion of supplemental materials and their importance is the subject of a JMEMS editorial 'Advancing Research and Increasing Citations for Your Paper'.