
Recent progress in Image Moments and Moment Invariants

After the successful publication of the first edited book in image moments and moment invariants in 2014, by the same publisher, attracting the attention of the scientific community, significant progress in the field of image moments and moment invariants has been noted. New moment families with improved numerical behavior and representation capabilities e.g. Quaternion, Fractional moments, novel fast and accurate computation algorithms, enhanced moment invariants and new application areas have been introduced in the recent years. This progress in the field of image moments reveals the continuing and growing interest of the scientists in evolving the theory of image moments and in expanding the usage of the image moments to new application areas. This book is aimed at achieving two main goals: (1) to record the progress in this scientific field in the last years and (2) to bring together, in the same publication, the most active and eminent scientists working worldwide in this field. The participation of the researchers is expected to be followed by the presentation of new ideas, trends and prospects through original contributions in the form of book chapters.

Guest Editor

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Short CV: Dr. George A. Papakostas received the diploma in Electrical and Computer Engineering in 1999, and the M.Sc. and Ph.D. degrees in Electrical and Computer Engineering in 2002 and 2007, respectively, from the Democritus University of Thrace (DUTH), Greece. Dr. Papakostas currently serves as a full Professor in the Department of Computer Science, International Hellenic University, Greece. He has (co)authored more than 100 publications in indexed journals, international conferences and book chapters. He has served as Leading Guest Editor in 6 journal special issues and 2 Edited Books. Dr. Papakostas is the Vice Head of the Computer Science Department (since 2017), the Director of the MPhil Postgraduate Program "Advanced Technologies in Informatics and Computers" (since 2016) and the Director of the Visual Computing Division of [HUMAIN-Lab](#) (since 2016). His research interests include pattern recognition, computer/machine vision, computational intelligence, machine learning, feature extraction, evolutionary optimization, signal and image processing. Dr. Papakostas has served as a reviewer in numerous journals and conferences and he is a member of the IAENG, MIR Labs, EUCogIII and the Technical Chamber of Greece (TEE).

Topics of Interest

Original contributions, not currently under review to a journal or a conference, are solicited in relevant areas of *Associative Memories* including, but not limited to, the following

- New moment families
- Accuracy analysis of moment functions
- Derivation of moment invariants
- Theoretical and experimental analysis
- Moments in engineering
- Moments in pattern recognition and computer vision
- Moments in signal, image and video processing
- Moments in biomedicine
- Fast and accurate computation algorithms
- Software implementations
- Hardware implementations
- Novel applications of moments and moment invariants

Important Dates

25 May, 2020	Chapter Proposal Submission (max. 2 pages)
01 June, 2020	Decision Notification
15 August, 2020	Full Chapter Submission
15 September, 2020	Notification of Reviews
20 September, 2020	Final Submission
12 October, 2020	Notification of Proofs
01 November, 2020	Online Publication

Instructions for Authors

- The initial chapter proposal should be maximum 2 pages.
- The length of the final book chapter should be maximum 24 pages.
- The language of the book chapter is English.
- No specific formatting guidelines are requested.
- The chapter proposal should be submitted in PDF format.
- The article processing and publication charges are in accordance with the publisher's [regulations](#).
- Please read the [instructions for authors](#) provided by the publisher.
- A free hardcopy of the Edited book will be sent by post to the author(s) of each contributed chapter.
- All chapters should be submitted to gcsrbooks@sciencegatepub.com, with subject "Moments and Moment Invariants".

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