

Gunturk, Bahadir Kursat (ed.); Li, Xin (ed.)

Image restoration. Fundamentals and advances. (English) [Zbl 1252.68033](#)

Digital Imaging and Computer Vision. Boca Raton, FL: CRC Press (ISBN 978-1-4398-6955-0/hbk). xvii, 343 p. (2012).

Publisher's description: The book responds to the need to update most existing references on the subject, many of which were published decades ago. Providing a broad overview of image restoration, this book explores breakthroughs in related algorithm development and their role in supporting real-world applications associated with various scientific and engineering fields. These include astronomical imaging, photo editing, and medical imaging, to name just a few. The book examines how such advances can also lead to novel insights into the fundamental properties of image sources.

Many advances in imaging, computing, and communications technologies are addressed covering in a balanced way core fundamental principles and the latest developments in this area. Its content is designed based on the idea that the reproducibility of published works on algorithms makes it easier for researchers to build on each other's work, which often benefits the vitality of the technical community as a whole. For that reason, this book is as experimentally reproducible as possible.

The articles of this volume will not be indexed individually.

MSC:

- [68-06](#) Proceedings, conferences, collections, etc. pertaining to computer science
- [68U10](#) Computing methodologies for image processing
- [68T45](#) Machine vision and scene understanding
- [94A08](#) Image processing (compression, reconstruction, etc.) in information and communication theory
- [68-04](#) Software, source code, etc. for problems pertaining to computer science

Cited in **5** Documents

Software:

[Image Processing Toolbox](#); [Matlab](#); [Wavelet Toolbox](#)