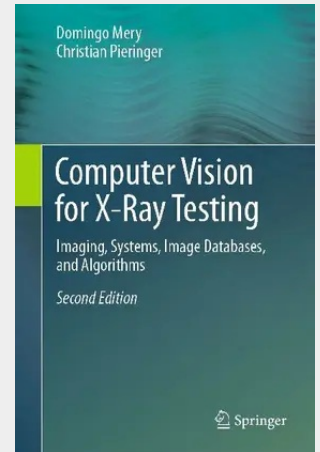


Computer Vision for X-Ray Testing

Imaging, Systems, Image Databases, and Algorithms

[FIRST EDITION] This accessible textbook presents an introduction to computer vision algorithms for industrially-relevant applications of X-ray testing. Features: introduces the mathematical background for monocular and multiple view geometry; describes the main techniques for image processing used in X-ray testing; presents a range of different representations for X-ray images, explaining how these enable new features to be extracted from the original image; examines a range of known X-ray image classifiers and classification strategies; discusses some basic concepts for the simulation of X-ray images and presents simple geometric and imaging models that can be used in the simulation; reviews a variety of applications for X-ray testing, from industrial inspection and baggage screening to the quality control of natural products; provides supporting material at an associated website, including a database of X-ray images and a Matlab toolbox for use with the book's many examples.

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