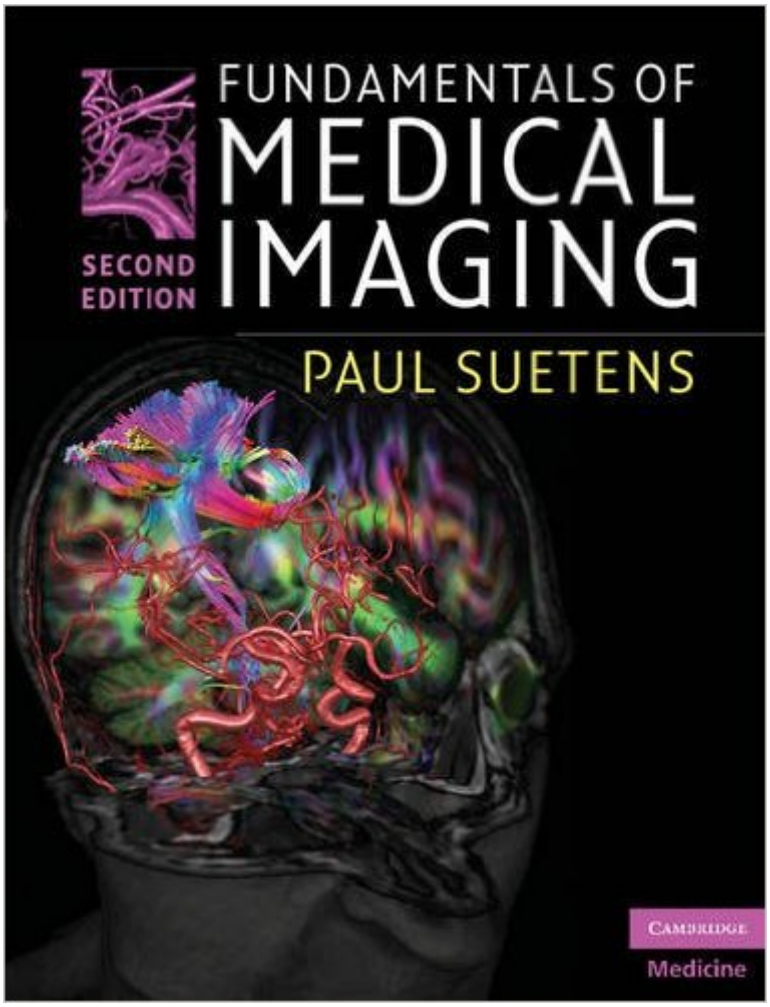
# Fundamentals Of Medical Imaging



## Synopsis

Fundamentals of Medical Imaging, second edition, is an invaluable technical introduction to each imaging modality, explaining the mathematical and physical principles and giving a clear understanding of how images are obtained and interpreted. Individual chapters cover each imaging modality - radiography, CT, MRI, nuclear medicine and ultrasound - reviewing the physics of the signal and its interaction with tissue, the image formation or reconstruction process, a discussion of image quality and equipment, clinical applications and biological effects and safety issues. Subsequent chapters review image analysis and visualization for diagnosis, treatment and surgery. New to this edition: â ¢ Appendix of questions and answers â ¢ New chapter on 3D image visualization â ¢ Advanced mathematical formulae in separate text boxes â ¢ Ancillary website containing 3D animations: www.cambridge.org/suetens â ¢ Full colour illustrations throughout Engineers, clinicians, mathematicians and physicists will find this an invaluable aid in understanding the physical principles of imaging and their clinical applications.

## Book Information

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## Customer Reviews

I bought this because it was ’required’ for my graduate level medical imaging course. It is however, not up to par for what a biomed. eng. or medical physicist would want/need. It is more appropriate for a medical student interested in imaging or a radiology resident. For the course, we quickly ended up referring to Jerry Prince’s Medical Imaging Signals and Systems, which goes much more in depth into the math, yet explains it really well.

The Patient's Medical Journal: Record Your Personal Medical History, Your Family Medical History, Your Medical Visits & Treatment Plans Fundamentals of Medical Imaging Principles of Radiographic Imaging: An Art and A Science (Carlton,Principles of Radiographic Imaging) Ethical and Legal Issues for Imaging Professionals, 2e (Towsley-Cook, Ethical and Legal Issues for Imaging Professionals) Radiographic Imaging and Exposure, 4e (Fauber, Radiographic Imaging & Exposure) Diagnostic Imaging: Head and Neck: Published by Amirsys (Diagnostic Imaging (Lippincott)) The Filmmaker's Guide to Digital Imaging: for Cinematographers, Digital Imaging Technicians, and Camera Assistants Fundamentals of Light Microscopy and Electronic Imaging Fundamentals of Musculoskeletal Imaging (Contemporary Perspectives in Rehabilitation) Radiology 101: The Basics and Fundamentals of Imaging Patient Care in Radiography: With an Introduction to Medical Imaging, 9e The Essential Physics of Medical Imaging, Third Edition The Mathematics of Medical Imaging: A Beginner's Guide (Springer Undergraduate Texts in Mathematics and Technology) Metaphysics: The Fundamentals (Fundamentals of Philosophy) Fundamentals of Special Radiographic Procedures, 5e (Snopek, Fundamentals of Special Radiographic Procedures) Fundamentals of Complementary and Alternative Medicine, 5e (Fundamentals of Complementary and Integrative Medicine) Fundamentals of Body MRI, 2e (Fundamentals of Radiology) Fundamentals of Skeletal Radiology, 4e (Fundamentals of Radiology) Fundamentals of Body CT, 4e (Fundamentals of Radiology) Fundamentals of Pediatric Orthopedics (Staheli, Fundamentals of Pediatric Orthopedics)