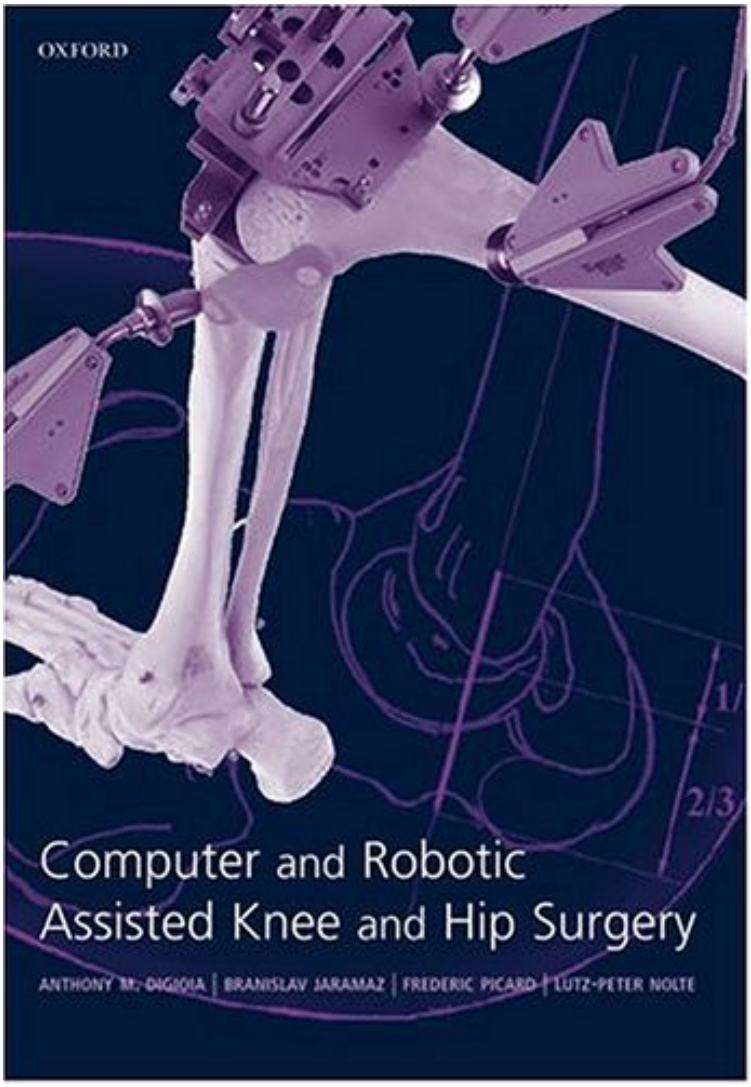
Computer and Robotic Assisted Hip and Knee Surgery

From Oxford University Press
*ebooks | Download PDF | *ePub | DOC | audiobook*



#4837172 in Books 2004-12-30Original language:EnglishPDF # 1 6.80 x 1.00 x 9.50l, 1.83 #File Name: 019850943X348 pages | File size: 38.Mb

From Oxford University Press : Computer and Robotic Assisted Hip and Knee Surgery before purchasing it in order to gage whether or not it would be worth my time, and all praised Computer and Robotic Assisted Hip and Knee Surgery:

0 of 0 people found the following review helpful. Definitive reference from the guys that wrote the book on computer assisted hip and knee surgeryBy Tara NikouMy husband says it's great!

The book presents an overview of available Computer Assisted Orthopaedic Surgery (CAOS) solutions to assist with adult reconstructive hip and knee procedures. The benefjits of CAOS in clinical practice include improved planning,

increased accuracy, intraoperative information and guidance, and the potential to enable less or minimally invasive surgery without loss of accuracy. The book reflects the current state of the art in computer integrated surgery, with the emphasis on clinically tested systems and procedures. The application of technologies such as surgical navigation and robotic surgery, medical imaging, surgical planning and stimulation in total or partial hip and knee reconstruction procedures is presented. The range of currently employed approaches is covered, spanning from active robotics to navigation based medical images - either preoperative or inreoperative, and image-free navigation. The first part of the book offers the clinical rationale for the use of CAOS procedures and describes the basic technological building blocks of such procedures and systems. The second part of the book describes specific applications in total hip replacement, total and unicompartmental knee replacement, osteotomies around the hip and knee, knee ligament reconstruction and hip and knee trauma. The clinical goal, the technological approach, and the clinical results are outlined for every application. The book is intended for practicing orthopaedic surgeons, fellows, residents-in-training and medical students interested in the latest technological developments in computer assisted surgery as well as for engineers and developers interested in learning more about the interaction of advanced technology with orthopaedic clinical practice.

This book contains up-to-date information on relatively new surgical techniques that involve the assistance of computers and robotics to guide the surgeon performing the critical portion of hip and knee replacement surgery and accurately positioning the prosthetic components . . . This publication should be available in all orthopaedic libraries. * Doody's Journal *About the AuthorAnthony DiGioia, Branislav Jaramaz, and Frederick Picard are all at the Institute for Computer Assisted Orthopaedic Surgery, The Western Pennsylvania Hospital, Pittsburgh. Lutz-Peter Nolte is at the Maurice Muller Institute for Biomechanics, Berne, Switzerland