

Preface

This book really shows how registration works: the flip-book appearing at the top right corners shows a registration of a human knee from bent to straight position (keeping bones rigid). Of course, the book also provides insight into concepts and practical tools. The presented framework exploits techniques from various fields such as image processing, numerical linear algebra, and optimization. Therefore, a brief overview of some preliminary literature in those fields is presented in the introduction (references [1–51]), and registration-specific literature is assembled at the end of the book (references [52–212]). Examples and results are based on the FAIR software, a package written in MATLAB. The FAIR software, as well as a PDF version of this entire book, can be freely downloaded from www.siam.org/books/fa06.

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