Strings and necklaces: on learning and browsing medical image segmentations
Ghebreab, S.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Strings and Necklaces
On Learning and Browsing Medical Image Segmentations

Sennay Ghebreab
This book is typeset by the author using \LaTeX\ 2\epsilon. The main body of the text is set using Times font ©Adobe Systems Incorporated. All graphics and images are included in the text in encapsulated Postscript format \textsuperscript{TM} Adobe Systems Incorporated.

The graphic on the cover symbolically represents the complex task a computer faces when trying to find relevant structures in digital images. For the observer it is difficult, if not impossible, to decide without prior knowledge whether a structure is present in the graphic and to decide what that structure is. The graphic is a mosaic of the segmentation of the lumbar spine illustrated in chapter 6 and on the cover flops (in color). This information aids the observer in recognizing the various structures such as the vertebrae and the aorta. In a similar manner prior information may assist automatic segmentation methods in finding relevant structures in digital images.

Copyright ©2002 by Sennay Ghebreab
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission from the author.

ISBN 90-9015953-3
Strings and Necklaces
On Learning and Browsing Medical Image Segmentations

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam,
op gezag van de Rector Magnificus prof. mr. P.F. van der Heijden
ten overstaan van een door het College voor Promoties ingestelde commissie,
in het openbaar te verdedigen in de Aula der Universiteit
op woensdag 3 juli 2002 te 11:00 uur

door

Sennay Ghebreab

geboren te Addis Abeba, Ethiopië.
The research described in this thesis was carried out at the Intelligent Sensory Information Systems Group (University of Amsterdam). The research took place in cooperation with the Image Science Institute (Utrecht University) and Philips Medical Systems (EasyVision Advanced Development) within the framework of the Innovation Oriented Research pogramm (IOP Beeldverwerking, project number IBV 96012). Part of the research was conducted at the Image Processing and Analysis Group (Yale University). The project was financially supported by the Dutch Ministry of Economic Affairs.