

Automated planning approaches for non-invasive cardiac valve replacement procedures from CT angiography

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Citation

Gao, X. (2017, November 7). Automated planning approaches for non-invasive cardiac valve replacement procedures from CT angiography. ASCI dissertation series. Retrieved from https://hdl.handle.net/1887/57132

Version: Not Applicable (or Unknown)

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Title: Automated planning approaches for non-invasive cardiac valve replacement

procedures from CT angiography

Date: 2017-11-07

10 Acknowledgements About the author Publications

Acknowledgements

The work in this thesis started from Oct 26th, 2012, under the supervision of Prof. dr. ir. Johan H. C. Reiber, Prof. dr. ir. Boudewijn P.F. Lelieveldt and Dr. ir. Jouke Dijkstra, located in the Department of Applied Research, Medis medical imaging systems bv, the Netherlands, and the Division of Imaging Processing (LKEB), Department of Radiology, Leiden University Medical Center.

Dear Hans, thanks for your enormous help, support and encouragement. I learnt how to do research, how to collaborate with others from you. You always notice the important point and have solution for all kinds of situations.

Dear Boudewijn, I want to express my respect to your generous, decent and honest character.

Dear Jouke, your nice advices always appeared at the best moment.

The technical side of the work is also helped with two persons: Pieter Kitslaar and Shengxian (Sanven) Tu.

Dear Pieter, thank you for knowledge of CT images, programming, and encouragement, the skill to communicate and help in moving. Also, patience to listen to questions from me and give reasonable suggestions.

Dear Sanven, you are the one helped me to set up the base of work and life in Netherlands, give smart and critical advice. Your serious attitude, efficiency in work, quick reaction and hard-working are really impressive.

For the validation of the methods, I was helped by multiple physicians.

Ricardo, thanks for your selfless support. I understand that you are already busy with your clinical work, but you always answer my questions after that. And you also inspired me a lot from clinical side.

Sara, I admire your board clinical knowledge, high efficiency, always help me with datasets, contours. We discuss with coffee and apple dessert, adding as much sugar as possible, which is really good time for me.

Also thanks to Mohamed, Arthur and Michiel, Bo Xu and Liang Xu, Martin and Tomas.

I would like to express my thankfulness to people in Medis. Yingguang, it is nice to know you here to share feelings about PhD and life. And thanks to Joan for advices in statistical analysis and dutch life. Also thanks to David, for very useful clinical feedbacks. Shufang, nice to have

you to spend the shopping and dinner times together. Kees, for advices about both research and development. Jasper, for help in algorithms. Linna, I enjoyed small shopping with you. Paulo, for help in all IT issues. And Bob, Daniel, EelcoG, EelcoV, Kevin, Gert-Jan, Gerhard, Guido, Marcel, MarcoG, MarcoL, Sylvia, Yuko, and all the others if I forgot to mention, really nice to meet you here.

Besides, I am also grateful to people in LKEB. Alex, I remember your help in my paper and your nice coffee. Patrick, for your coffee in the morning and reminder during lunch. Niels, I had interesting and friendly discussions with you about daily life. Jeroen, thanks for explanation in general PhD related questions. Qian, Shan, Yuchuan, Nancy, Qing, Zhuo, and Zhiwei: Qian, for nice advices; Yuchuan, your knowledge about registration, generous dinner, excellent cooking skills are really impressive, also your hard-working, always being so helpful and decent. Shan, thank you for nice lunch and dinner times, wish you all the best in UK. Nancy, thanks for the mature advices about life. Qing, you are always a great supporter. Zhuo, discussion with you broaden my mind in research and life. Zhiwei, your sunny smile is nice. Also thanks to others I met, Baldur for your help in correcting gramma in my paper; Denis, for help in Elastix; Leo, for casual discussions from music to politics; Marius, for advices in registration; Rahil, for the advice in algorithm; Zhenia, for downloading papers for me. Ahmed, Berend, Els, Floris, Michiel, Oleh, Pauline, Rob, Walid, and all the others if I forgot to mention, it is really nice to meet you here.

Finally, thanks to my friends here and in China, my parents. Father and mother, you are the best.

Xinpei Gao

Leiden, November 2017

About the author

Xinpei Gao was born in Jiangsu, China on 1987. After high school, she started studying the department of Biomedical Engineering in Southeast University in Nanjng, China. The department aims to train students in both biomedical and engineering fields. She received the bachelor degree in June 2009. In the same year, she was recommended to be a master student in the same department. During her master period, she also did internship in China Academy of Science (CAS), Suzhou Institute of Biomedical Engineering and Technology (SIBET). After graduation, she worked as a PhD student at Applied research department of Medis BV., and Division of image processing (LKEB), Radiology, Leiden University Medical Center. She developed clinical applications for pre-operative planning of aorta-related disease in CTA images which end up in this thesis.

Chapter 10

List of publications

Journal papers

Xinpei Gao, Pieter Kitslaar, Ricardo P.J. Budde, Shengxian Tu, Michiel A. de Graaf, Liang Xu, Bo Xu, Arthur J.H.A. Scholte, Jouke Dijkstra, Johan H.C. Reiber, Automatic detection of aorto-femoral vessel trajectory from whole-body computed tomography angiography data sets, The international journal of cardiovascular imaging. DOI: 10.1007/s10554-016-0901-5

Xinpei Gao, Sara Boccalini, Pieter Kitslaar, Ricardo P.J. Budde, Shengxian Tu, Michiel A. de Graaf, Tomas Ondrus, Martin Penicka, Arthur JHA Scholte, Boudewijn PF Lelieveldt, Jouke Dijkstra, Johan HC Reiber, Quantification of aortic annulus in computed tomography angiography: development and validation of a novel fully automatic methodology, European Journal of Radiology, 2017.

Xinpei Gao, Pieter Kitslaar, Michiel A. de Graaf, Alexander Broersen, Shengxian Tu, Boudewijn P.F. Lelieveldt, Arthur J.H.A. Scholte, Jouke Dijkstra, Johan H.C. Reiber, Fully automatic volume quantification of aortic valve calcium in coronary computed tomography angiography, Cardiovascular Diagnosis and Therapy, 2017.

Xinpei Gao, Sara Boccalini, Pieter H. Kitslaar, Ricardo P.J. Budde, Shengxian Tu, Boudewijn P.F. Lelieveldt, Jouke Dijkstra, Johan H.C. Reiber, Automatic detection of aortic dilatation in baseline and follow-up contrast enhanced computed tomography angiography – submitted to European Radiology.

Conference papers

Xinpei Gao, Pieter Kitslaar, Arthur J. H. A. Scholte, Boudewijn P. F. Lelieveldt, Jouke Dijkstra, Johan H. C. Reiber, "Automatic aortic root segmentation in CT: a whole-body dataset", SPIE Medical Imaging 2016

Xinpei Gao, Shengxian Tu, Michiel A de Graaf, Liang Xu, Pieter Kitslaar, Arthur JHA Scholte, Bo Xu, Johan HC Reiber, "Automatic Extraction of Arterial Centerline from Whole-body Computed Tomography Angiographic Datasets", Computing in Cardiology 2014

Abstracts

Xinpei Gao, Sara Boccalini, Pieter Kitslaar, Ricardo P J Budde, Johan HC Reiber, Validation of a novel fully automated aortic annulus measurement

algorithm in cardiac CT data sets, European Society of Cardiac Radiology annual scientific meeting 2016, **Young Abstract Presenter Programme**

Xinpei Gao, Pieter Kitslaar, Michiel de Graaf, Boudewijn P.F. Lelieveldt, Jouke Dijkstra, Johan H.C. Reiber, Aortic valve calcium measurement in contrast-enhanced cardiac CT images: Evaluation of a fully automatic method, European Congress of Radiology 2017

Sara Boccalini, **Xinpei Gao**, Pieter Kitslaar, Ricardo P J Budde, Johan HC Reiber, Automatic quantification and visualization of thoracic aorta diameters on successive CTA scans, European Society of Cardiac Radiology annual scientific meeting 2017