



Universiteit  
Leiden  
The Netherlands

## **Pinning down loosened prostheses : imaging and planning of percutaneous hip refixation**

Malan, D.F.

### **Citation**

Malan, D. F. (2015, October 29). *Pinning down loosened prostheses : imaging and planning of percutaneous hip refixation*. Retrieved from <https://hdl.handle.net/1887/36019>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/36019>

**Note:** To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/36019> holds various files of this Leiden University dissertation.

**Author:** Malan, Daniel Francois

**Title:** Pinning down loosened prostheses : imaging and planning of percutaneous hip refixation

**Issue Date:** 2015-10-29

# Curriculum Vitae

Daniël François Malan was born on 22 October 1979 in Tygerberg, South Africa. In 1997 he matriculated at Stellenbosch High School, placing 5th in the Western Cape Province. He spent 1998 as a Rotary International exchange student. In 2001 and 2002 obtained the degrees B.Sc. (mathematical sciences) and Hons. B.Sc. (applied mathematics), both *cum laude*, at the University of Stellenbosch. He completed his M.Sc. (engineering sciences) *cum laude* in 2005 with the thesis titled “*3D Tracking Between Satellites using Monocular Computer Vision*”.

From 2005 Francois did scientific programming at Integrated Seismic Systems International (ISSI) on the outskirts of Stellenbosch. Here he contributed to software for modelling stresses and seismicity in mining environments. In 2007 he joined *Sunspace* to work on mission control software for South Africa’s small Earth observation satellite called *SumbandilaSat*.

In 2008 Francois relocated to The Netherlands to pursue a PhD in medical image processing and visualization at Leiden University. His work included collaboration with the medical visualization group at Delft University of Technology where he also successfully supervised three M.Sc. students. His own PhD research was funded by the Dutch organization for scientific research, NWO. During this period Francois also served for one year as a board member for the PhD candidates Network of the Netherlands (PNN). As product manager at *Clinical Graphics* from 2012-2013, he worked on visualization of femoro-acetabular hip impingement.

Francois now again pursues his earlier engineering interests in the field of space applications. Since returning to South Africa in 2014 he is product manager for space-borne imaging systems at *Space Advisory Company*, as well as a systems engineer contributing to the *Square Kilometer Array* project.

In his spare time Francois enjoys sport and the outdoors—including running, snowboarding and squash. He is also a keen photographer.



# Acknowledgements

The PhD process is notorious for being long and emotionally difficult. When I started this journey I knew the stereotypes, saw friends become those stereotypes, and regularly laughed at "PhD Comics". In the end my own long experience was a difficult one, but along the way I also had the best experiences of my life. With many of the people that were part of this journey I expect to remain close friends for the rest of our lives.

The work that culminated in this thesis was performed in the Medical Delta, a collaboration between the Department of Orthopaedics at Leiden University Medical Center and the Departments of 3ME and Intelligent Systems at Delft University of Technology.

Specifically I want to thank Charl Botha who was my co-supervisor and mentor. By initially spreading news of this PhD position to South Africa he started it all. Charl inducted me into The Netherlands and showed the way to becoming well integrated and (almost) Dutch. As a friend he is a constant source of enthusiasm, inspiration and new experiences.

I also thank my two main supervisors: Edward Valstar who made the whole project possible and patiently steered its direction, and Rob Nelissen for the warm and down-to-earth sincerity with which he headed our department.

Peter Krekel, who helped me find a house in Delft even before I met him, shared journeys and music festivals, and eventually became my colleague at the company he himself founded - we've had a long and meaningful journey. Peter Schaafsma, for his lively philosophy. Wynand, whom I met in South Africa as a fellow student, who became a fellow PhD candidate in Delft, a house-mate, a colleague at Clinical Graphics, and eventually again a fellow South African resident in the beautiful Cape.

Noeska, Thomas, Changgong, Peter Kok, Renata and Gerwin - my excellent office-mates in Delft over the years. Elmar for his academic support. Ruud for the coffee, and Bart for his enthusiasm about photography and nature. Ricardo and Luisa for their humour and friendship. Bas and Christian whom I had the privilege of supervising. Nienke, Nora, Vikas, Bouke, and my colleagues at the LUMC. Sander, Frans and the guys from our CdE cycling group. Tom, Anna and Malou at PNN who were also dependable friends.

Fred at the LUMC's Anatomy department. Koos, Paul, Raoul and Berend at Medical Physics. To the majority of my other colleagues at the LUMC in Leiden, at the TU Delft, at PNN and at Clinical Graphics and Yes!Delft whose names I omit here – I greatly enjoyed interacting with you!

Familie Rohof, who I knew for many years before coming to their country, and who were my family in Oosterhout. Annemarie and André who welcomed me in Delft's inner city in the early years. Anne-Marie for her loyal friendship and support. Tjaart, with whom I shared so many experiences. Andriy and Marta, my first and best Ukrainian friends, who became my family and gave me their home in difficult times. Lauren, for being a wonderful friend and partner to Stéfan. Stéfan who was and still is there for me as best friend, travel partner, and who even co-authored the last chapter of this thesis - your support and contributions are invaluable to me.

My mother who supported my choices throughout. Thys and Lynda, for their wisdom and guidance. Theo, Marga, Eveline and Reiner who were a family to me. Lastly and most importantly Linda, who believed in me more than anyone else and became part of who I am.