

Education:

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- 2003-2007: **Doctoral student at Delft University of Technology** (EWI, CG&CC)
- Degree: **Ph.D. in Computer Science** (Nov. 26th 2008)
- Faculty / group: Electrical Engineering, Mathematics & Computer Science (EWI)
Computer Graphics & CAD/CAM (CG&CC)
- Thesis: Semantics of Families of Objects
Project website: <http://graphics.tudelft.nl/~rick/sfo>
- Post-graduate Virtual Reality and Visualisation
courses: Multimedia Retrieval
- Reference: Dr. W.F. Bronsvort
Delft University of Technology
Tel: (+31/0) 15 27 82533
E-mail:W.F.Bronsvort@tudelft.nl
- 1995-2003: **Masters student at Delft University of Technology** (EWI, CG&CC)
- Degree: **MSc in Computer Science**
- Specialisation Technical Informatics
- Average grade: 7.6
- Thesis: Specification of Freeform Features
- Thesis grade: 9
- 1989-1995: **Comenius College, VWO** (preparatory scientific secondary education)
- Courses: Mathematics (B), Physics, Biology, Economics, History, English,
Dutch.
- Average grade: 7.5

Side jobs:

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- 01/1999 – 09/1999 **Computer programmer at Instituut voor Nederlandse Lexicologie** (Institute for Dutch Lexicology, Leiden)
Java/C++ based implementation of a database server for search in a text corpus

Extracurricular activities:

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- 09/1998 – 09/1999 **Manager at student society ‘DSV De Nieuwe Delft’**
University sponsored position (bestuursbeurs)

Student projects:

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- 07/1998 – 10/1998 **Student Exchange project at University of Portsmouth**
Design and implementation of a framework for robot navigation in a graphical programming language. Collaboration with Portech Ltd.
- 05/1998-07/1998 **Software for back-injury revalidation**
part of graduation project of Walter van de Bilt, low level programming of gyroscopic measurement hardware and a simple computer game.

Language skills:

Dutch	Native speaker, good reading and writing skills.
English	Very good speaking, reading and writing skills

Programming skills:

<i>Programming language</i>	<i>Type of applications & libraries</i>
C/C++	2D/3D graphics (Ogre, OpenGL), parsers (Jacc/Lex), CAD kernels (ACIS)
Java	GUI's (Swing), web-servlets (J2EE, Tomcat), XML
Python	prototype software, glue (SWIG), GUI (pyQT, tkInter)
PHP	MyPhP CMS, MySQL, photo manager application
Assembly (x86)	low-level graphics, interrupt handling
Mathematica	computer algebra, e-learning systems
Lisp/Modula/Perl/Prolog/Tcl/Haskell & more esoteric languages	educational use, experimentation, fun!
BASIC (several variants)	my first language, self-taught.

Other skills:

- Lecturing in the classroom and coaching student projects (academic level)
- Teaching workshops in improvisation theatre
- Light & sound technician for small theatre productions
- Driver's licence (B)

Hobbies:

- Theatre: I have played a part in a number of theatre productions and have been active in improv theatre and theatresports for many years.
- Programming: I spend a lot of time programming on one of my many small projects, mostly concerning computer graphics, games or intriguing mathematical problems.
- I like in-line skating, cats, books and photography
(see my Flickr photo page: <http://www.flickr.com/photos/kwikrick>).

Selected publications

Ph.D. Thesis:

Semantics of Families of Objects, PhD. Thesis, Delft University of Technology, 2008.

Research papers:

van der Meiden, H. A. and Bronsvoort, W. F. (2005). *An efficient method to determine the intended solution for a system of geometric constraints*. International Journal of Computational Geometry and Applications, 15(3):279–298 ([doi:10.1142/S0218195905001701](https://doi.org/10.1142/S0218195905001701))

van der Meiden, H. A. and Bronsvoort, W. F. (2006). *A constructive approach to calculate parameter ranges for systems of geometric constraints*. Computer-Aided Design, 38(4):275–283 (Special issue on 2005 ACM Symposium on Solid and Physical Modeling) ([doi:10.1016/j.cad.2006.01.006](https://doi.org/10.1016/j.cad.2006.01.006))

van der Meiden, H. A. and Bronsvoort, W. F. (2007). *Solving topological constraints for declarative families of objects*. Computer-Aided Design, 39(8):652–662 (Special issue on 2006 ACM Symposium on Solid and Physical Modeling) ([doi:10.1016/j.cad.2007.05.013](https://doi.org/10.1016/j.cad.2007.05.013))

van der Meiden, H. A. and Bronsvoort, W. F. (2007). *Tracking topological changes in feature models*. In L'vy, B. and Manocha, D., editors, Proceedings ACM Symposium on Solid and Physical Modelling, June 4–6, Beijing, China, pages 341–346. ACM Press, New York, NY, USA (an extended version has been submitted for publication in Computer-Aided Geometric Design)

Hilderick A. van der Meiden and Willem F. Bronsvoort, 2008, *A Workbench for Geometric Constraint Solving*, Computer-Aided Design and Applications, Volume 5, Numbers 1-4 (Proceedings CAD'08, June 23-27, 2008, Orlando, Florida) ([doi: 10.3722/cadaps.2008.471-482](https://doi.org/10.3722/cadaps.2008.471-482))

Hilderick A. van der Meiden and Willem F. Bronsvoort, 2009, *Declarative modeling of families; review and prospects*, Computer-Aided Design and Applications, Volume 6, Number 3, pp. 291-306 (Proceedings CAD'09, June 2-6, 2009, Reno, Nevada) ([doi: 10.3722/cadaps.2009.291-306](https://doi.org/10.3722/cadaps.2009.291-306))

van der Meiden, H. A. and Bronsvoort, W. F. (2009). *Solving systems of geometric constraints using non-rigid clusters*. Accepted for publication in Computer-Aided Design. Article in Press. ([doi:10.1016/j.cad.2009.03.003](https://doi.org/10.1016/j.cad.2009.03.003))

My Ph.D. Thesis and research papers are available on-line:

<http://graphics.tudelft.nl/~rick>