



## Roger Graaf

### PERSONAL DETAILS

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**Address**

Broekerweg 14, 6291 VH Vaals

**Telephone**

+31-626810147

**Email**

[roger.graaf@hetnet.nl](mailto:roger.graaf@hetnet.nl)

**Date of birth**

29. August 1967

**LinkedIn**

[Roger Graaf](#)

### SKILLS

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- Engineering Expertise
- Research & Development
- Innovation Strategy
- Leadership & Team Building
- Communication Skills
- Commitment to Excellence
- Project Management
- Analytical Thinking
- Problem-Solving
- Results-Driven Approach
- Academic Teaching

### LANGUAGES

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Dutch: Native

English: Fluent

German: Fluent

### HOBBIES

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- Travel and Exploration
- Photography
- Cooking
- Running, Cycling, Fitness

### PROFILE

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Experienced Mechanical/Automotive Engineer with over 30 years of experience in automotive research and development, specialized on electrified powertrains, vehicle dynamics, chassis control, and partially automated driving. Demonstrated expertise in enhancing vehicle system performance through innovative design and advanced software applications, with proficiency in CAE, HIL, RCP, and control software development tools such as MATLAB, Simulink, and dSpace.

As a Technical Expert at Ford's European Research Center, I lead the push for technological advancements, explore new research opportunities, and forge strategic supplier partnerships to drive innovation. I am committed to precision and excellence, both in independent endeavors and collaborative team environments.

I am an engaged contributor to academia with a robust portfolio of publications, patents, and conference presentations. I am deeply passionate about education and mentorship of students and have had the privilege of sharing my industry knowledge as a Guest Lecturer at Cologne University of Applied Sciences, guiding, and inspiring the next generation of engineers.

### WORK & PROFESSIONAL EXPERIENCE

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**Ford Werke GmbH, Research and Innovation Center Europe, Aachen****Technical Expert (11/2004 – present)**

- Leading advanced technology initiatives, and strategic partnerships, driving innovation in automotive research.
- Managing and mentoring engineering teams, promoting a culture of excellence and collaboration.
- Directing the development of active steering systems, active suspension systems, and vehicle motion control technologies.
- Global leader for electric in-wheel motor (IWM) technology, steering research, and strategy formulation.
- Leading consortia for BMWi-sponsored IWM technology research projects.
- Innovator in ADAS development and research.

**Senior Research Engineer (01/2000 – 10/2004)**

- Developed a MATLAB/SIMULINK-based tool suite for active chassis system development, significantly enhancing CAE, RCP, and HIL processes.
- Facilitated the global implementation of the CAE tool across all Ford brands.

**Research Engineer (01/1998 – 12/1999)**

- Led the development of an innovative lightweight front suspension system.
- Managed chassis and vehicle dynamics for a battery electric prototype vehicle, including system integration and tuning.

## **Cologne University of Applied Sciences, Cologne**

**Guest Lecturer** – Part-time (10/2002 – 07/2005)

- Designed and delivered lectures on vehicle dynamics, driveline, and chassis systems.
- Developed curriculum, prepared lecture materials, and administered examinations.

## **Forschungsgesellschaft Kraftfahrwesen mbH Aachen, Aachen**

**Research Engineer** (05/1991 – 12/1997)

- Developed simulation software for vehicle driveline dynamics and analysis of unconventional propulsion systems.
- Conceived powertrain concepts for electric and hybrid vehicles, including control strategies.
- Managed research projects, supervised student work, and mentored master's theses.

**Student Assistant** – Part-time (02/1991 – 05/1991)

## **Institut für Kraftfahrzeuge (ika) - RWTH Aachen University, Aachen**

**Student Assistant** – Part-time (05/1990 – 01/1991)

### **Internships**

- Kunststoff- und Metallverarbeitung Jos. Zimmermann GmbH & Co. KG, Aachen (1990)
- IJzergieterij Globon bv, Hoensbroek (1987)
- Machinefabriek & Constructiebedrijf Gebr. Steinbusch bv, Bocholtz (1985)

### **ACADEMIC EDUCATION**

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#### **RWTH Aachen University**

**Ph.D. (Promotion) in Mechanical Engineering** (05/1991 – 06/2002)

Grade: Summa Cum Laude

Thesis: "Simulation of hybrid drive concepts with short-term storage for motor vehicles" (Original: Simulation hybrider Antriebskonzepte mit Kurzzeitspeicher für Kraftfahrzeuge), supervised by Univ. Prof. Dr.-Ing. H. Wallentowitz

**M.Sc. in Mechanical Engineering (Diplom-Ingenieur), Specialization in Automotive Engineering**

(10/1985 – 05/1991)

Grade: Summa Cum Laude

#### **Sophianum, Gulpen**

*Atheneum* (08/1979 – 07/1985)

### **PUBLICATIONS & PATENTS**

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Full list of publications and patents available on Google Scholar: [Roger Graaf](#)

### **REFERENCES**

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References available upon request.