

PRIVATE
CONTACT
INFORMATION

Michael Koch
Uden, The Netherlands

Dutch nationality

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Languages: Dutch (native), English (professional), German (limited)

COMPACT
BIOGRAPHY

Computer vision and digital image/signal processing expert (2D, 3D, camera modeling and calibration) with theoretical knowledge and practical experience.
Experienced in Vision \leftrightarrow Robot collaboration (3D binpicking), communication between sub-systems, microcontrollers, leading (R&D) projects and project management.
Personal skills: result-oriented, no-nonsense approach, responsible, dedicated, reliable, accurate, practical and social.

EXPERIENCE

Beltech BV, Eindhoven, The Netherlands

Technical and R&D Lead

01/2016 – present

Solution architect for technical systems and R&D Lead Engineer for solving future automation problems and also to maintain competitive in the market.

Project Lead

04/2012 – present

Leading technical projects to ensure they perform within the limitations of time, money and resources but with a high quality of standard.

Vision Project (Lead) Engineer

01/2009 – present

Development (design and realization), validation, integrating, commissioning, maintenance and troubleshooting of machine vision systems (in-house and at customer premises, (inter-)national) containing software and hardware for industrial automation purposes.

Volunteer

Tutoring

2008 – 2014

Mathematics tutoring of a Bachelor of Engineering student.

NXP Semiconductors, Eindhoven, The Netherlands

Master's Thesis research project @ Embedded Computer Vision Lab

01/2008 – 10/2008

My research focused on the distributed smart camera calibration in a robust manner. Result was a working system with a high calibration confidence, implemented on an embedded system. A conference paper and an internal NXP report were written of my findings. This project was evaluated with grade 8.

Eindhoven University of Technology (TU/e), Eindhoven, The Netherlands

Internship @ Information and Communication Systems Group

09/2007 – 12/2007

Designed and successfully simulated an efficient 100 Watt switched power supply for inductive coupled coils across a gap to achieve contactless energy transfer between e.g. electronic devices.

Centre for Concepts in Mechatronics (CCM), Nuenen, The Netherlands

Technical College graduation student

03/2003 – 07/2003

Performed a performance analysis of an Altera FPGA by developing a motion controller in firmware as a test case. Hereby, the functionality of the FPGA could be optimal exploited. Interesting detail was that both parallel and sequential processes could be executed on this FPGA, because we could program a soft-core microprocessor (NIOS).

EDUCATION

Eindhoven University of Technology (TU/e), The Netherlands

09/2003 – 10/2008

Master of Science (M.Sc.) in Electrical Engineering

- Master @ Electronic Systems Research Group
- Master's graduation topic: *Distributed Smart Camera Calibration Using LED*
- Graduation date: October 2008
- Internship project: *Design of an efficient power supply for the C.E.T. Project*

Various Technical Management and Mathematics courses, 2003 – 2008.

Assistant *Platform Based Design* course, responsible for student lab assignment, 2007.

Haarlem University, The Netherlands

09/2000 – 08/2003

Bachelor of Engineering (B.Eng.) in Electrical Engineering

- Graduation project: *Performance analysis Altera FPGA with NIOS processor*
- Graduation date: August 2003
- Propaedeutic exam: Passed at July, 2001

Eindhoven ROC, The Netherlands

09/1996 – 06/2000

Intermediate technical school, Electrical Engineering

- Graduation date: June, 2000
- Technical College certificate: June, 2000

PUBLICATIONS

M. Koch, Z. Zivkovic, R. Kleihorst, H. Corporaal and B. Mesman, "Distributed Smart Camera Calibration Using LED", NXP internal Technical Note NXP-R-TN-2008/00278, October 2008.

M. Koch, Z. Zivkovic, R. Kleihorst, and H. Corporaal, "Distributed Smart Camera Calibration Using Blinking LED", in *Lecture Notes in Computer Science*, vol. 5259, October 2008.

M.A. Koch, "An efficient power supply for the Contactless Energy Transfer Project", TU/e internship report, December 2007.

LICENSES AND
CERTIFICATIONS

- NEN 3140
- VCA

HONORS

Half marathon runs:

- **Berlin**, 04/2016
- **Eindhoven**, 10/2015

COMPUTER
SKILLS

- Programming: Matlab, Python, C/C++, Java/JavaScript, Linux scripting, Perl
- Modeling: UML
- Publishing: \LaTeX , Microsoft Word
- Other: Microsoft Windows, Microsoft Office, OpenOffice

REFEREES

Available on request.