

# CV, Håkan EFTRING

## Personal data and Contact info

Name Håkan Eftring  
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## Education and Degrees

2005 Preparatory course for becoming associate professor  
2002 Excellent Teaching Practitioner Award, Lund University  
([http://www.lth.se/fileadmin/lth/genombrottet/LTHsPedAkad2005\\_eng.pdf](http://www.lth.se/fileadmin/lth/genombrottet/LTHsPedAkad2005_eng.pdf))  
1999 PhD in Rehabilitation Engineering, Lund University (22 Sept. 1999)  
1990 Licentiate Degree in Manufacturing Systems, Royal Institute of Technology  
1985 Master of Science in Mechanical Engineering, Royal Institute of Technology

## Positions

2004- Assistant professor at Certec, Division of Rehabilitation Engineering Research, Department of Design Sciences, Lund University  
1994-2004 University instructor in Rehabilitation Engineering at Certec, Lund University  
1992-1994 Research engineer in Rehabilitation Engineering at Certec, Lund University  
1989-1991 Researcher at IVF, The Swedish Institute of Production Engineering Research  
1986-1989 Research engineer at Department of Manufacturing Systems, Royal Inst. of Technology

## Appointments

2002- Director of studies at Department of Design Sciences  
2011- Project Manager of the EU HaptiMap project coordinated by Certec, Department of Design Sciences, Lund University  
1999-2008, 2010- Director of studies at Certec, Division of Rehabilitation Engineering Research  
2002-2010 Administrative head of Certec, Division of Rehabilitation Engineering Research  
2006-2010 Member of the Education Committee of Health Informatics (Advanced vocational education)  
2002, 2007-2009 Member of the reviewing committee of the Excellent Teaching Practitioner Award at Lund University  
2008 Member of the International Programme Committee of NordiCHI and Electronic submission chair (The Nordic Conference on Human-Computer Interaction)  
2005-2007 Substitute member of HSF (Rådet för hälso- och sjukvårdsforskning i södra Sverige)  
2002-2007 Substitute member of the board of the Department of Design Sciences  
2003-2005 Substitute member of the Education Committee of Industrial Design  
2001-2004 Deputy head of the Department of Design Sciences  
2001, 2003 Member of the International Scientific/Programme Committee of ICORR (The International Conference On Rehabilitation Robotics)  
2000-2002 Substitute member of the Education Committee of Computer Science  
1993-2002 Deputy head of Certec, Division of Rehabilitation Engineering Research

## Research profile

In my doctoral dissertation I introduced the concept of useworthiness. The concept is related to the user's values, needs, wishes and dreams, rather than the more technical relation between the user and the technology. My research areas include Rehabilitation engineering and design, Design for dynamic diversity, Accessibility, Usability, Rehabilitation robotics, Haptics, User-centred design methods, Cognitive ergonomics and Learning.

### Participation in larger projects

2012-2014	Giraff+ – Combing social interaction and long term monitoring for promoting independent living, EU
2011-2014	HOBbit – The Mutual Care Robot, EU
2008-2012	HaptiMap, Haptic, Audio and Visual Interfaces for Maps and Location Based Services, EU
2008-2009	Accessible Personal Communication, Region Skåne
2006-2007	MICOLE, Multimodal Collaboration Environment for Inclusion of Visually Impaired Children, EU
2005-2008	Design for the Human Sector, Sparbanksstiftelsen Skåne
1997-1998	A National Robotic Center for Rehabilitation, The National Board of Health and Welfare
1993-2004	Rehabilitation Robotics, Stiftelsen för bistånd åt rörelsehindrade i Skåne
1993-1996	EPI-RAID, Evaluation of Prototype and Improvements of the RAID workstation, EU
1991-1993	RAID, Robot to Assist the Integration of the Disabled, EU

### PhD supervision and examination

2009	Member of the examining committee at the public defence of Lars Oestreicher's doctoral thesis
2000-2008	Assistant supervisor for Kirsten Rasmus-Gröhn
2007	Discussion leader and reviewer at Elin Olander's pre-licentiate seminar
2004-2005	Assistant supervisor for Arne Svensk
2003-	Department representative at the yearly supervision meetings for PhD students in Rehabilitation engineering

### Teaching

Course responsibility for 7 different courses 1999-2012 (several of them multiple times).

Supervisor/examiner of 16 master theses works 1996-2012.

### Publications

- Magnusson, C., Larsson, A., Warell, A., Efring, H. (2011). *Key scenarios, contextual walkthrough and context trails – tools for better and more accessible mobile designs*, INTERACT 2011 Workshop on Mobile Accessibility. The 13th IFIP TC13 Conference on Human-Computer Interaction, INTERACT 2011, Lisbon, Portugal.
- Efring, H. (2011). *A model for an inclusive healthcare information system*. Sixth International Conference on Inclusive Design, London, UK.
- Gulz, A., Magnusson, C., Malmberg, L., Efring, H., Jönsson, B. & Tollmar, K. (Eds.): *Proceedings of the 5th Nordic Conference on Human-Computer Interaction 2008*, Lund, Sweden, October 20-22, 2008. ACM International Conference Proceeding Series 358 ACM 2008, ISBN 978-1-59593-704-9
- Magnusson, C., Rasmus-Gröhn, K. & Efring, H. (2007). *Drawing and guiding gestures in a mathematical task using the AHEAD application*. ENACTIVE 07, Grenoble, France.
- Rasmus-Gröhn, K., Magnusson, C. & Efring, H. (2007). *AHEAD - Audio-Haptic Drawing Editor And Explorer for Education*. HAVE 2007 – IEEE International Workshop on Haptic Audio Visual Environments and their Applications, Ottawa, Canada.
- Rasmus-Gröhn, K., Magnusson, C. & Efring, H. (2007). *Iterative design of an audio-haptic drawing application*, 25th SIGCHI Conference on Human Factors in Computing Systems, CHI 2007, San Jose, California, USA.
- Magnusson, C., Efring, H., Rasmus-Gröhn, K., Crossan, A., Brewster, S., Jansson, G., Juhasz, I., Stamou, A., Lauruska, V., Archambault, D., Sallnäs, E.-L., Hippula, A., Raisamo, R., Tanhua-Piironen, E., Pietrzak, T., Winberg, F. & Martin, B. (2007). *MICOLE D14: Final User Requirements and Design Recommendations*, Project deliverable to European Commission.
- Svensk, A. & Efring, H. (2006). *Design för lärande: Att utforma miljöer och ting som stöd för tanken (Design for learning: Designing environment and artefacts supporting thought)*. Poster at the final conference of The Swedish National Agency for Education, Stockholm, Sweden.
- Magnusson, C., Rasmus-Gröhn, K. & Efring, H. (2006). *A virtual haptic-audio line drawing program*. 3rd International Conference on Enactive Interfaces, Montpellier, France.
- Rasmus-Gröhn, K., Magnusson, C. & Efring, H. (2006). *User evaluations of a virtual haptic-audio line drawing prototype*. First International Workshop of Haptic and Audio Interaction Design, Glasgow, UK.
- Magnusson, C., Rasmus-Gröhn, K., Danielsson, H. & Efring, H. (2006). *Test of three different audio-haptic navigational tools*. 2nd Enactive Workshop, McGill University, Canada.
- Jönsson, B., Brattberg, G., Efring, H., Svensk, A. & Östlund, B (2006). *Design för den mänskliga sektorn. (Design for the human sector)*. Report of first year to Sparbanksstiftelsen Skåne.
- Jönsson, B., Anderberg, P., Brattberg, G., Breidegard, B., Efring, H., Enquist, H., Inde, K., Mandre, E., Nordgren, N., Svensk, A. & Whitelock, I. (2006). *Design Side by Side*. Lund, Sweden: Studentlitteratur.
- Jönsson, B., Anderberg, P., Brattberg, G., Breidegard, B., Efring, H., Enquist, H., Inde, K., Mandre, E., Nordgren, N., Svensk, A. & Whitelock, I. (2005). *Människonära design*. Lund, Sweden: Studentlitteratur.
- Panek, P., Neveryd, H., Edelmayer, G., Efring, H., Knall, G., Magnusson, C. & Mayer, P. (2005). *Design of a flexible user interface demonstrator, control software and sensors*. FRR Final Conference, Vienna, Austria.

- Jönsson, B., Svensk, A., Malmberg, L., Anderberg, P., Brattberg, G., Breidegard, B., Efrting, H., Enquist, H., Flodin, E., Gustafsson, J., Magnusson, C., Mandre, E., Nordgren, C. & Rassmus-Gröhn, K. (2005). *Situated research and design for everyday life*, Proceedings of Nordes, Nordic Design Research.
- Jönsson, B., Malmberg, L., Svensk, A., Anderberg, P., Brattberg, G., Breidegard, B., Efrting, H., Enquist, H., Flodin, E., Gustafsson, J., Magnusson, C., Mandre, E., Nordgren, C. & Rassmus-Gröhn, K. (2004). *Situated research and design for everyday life*. Certec Report, LTH, Number 2:2004.
- Efrting, H., Magnusson, C., Rassmus-Gröhn, K. & Sperling, L. (2000). *Teknologer och ID-studenter i samarbete (Engineering students and industrial design students in co-operation)*. Project report from the Inspiration course in pedagogics, LTH, Lund University.
- Efrting, H. (1999). *The Usefulness of Robots for People with Physical Disabilities*. Doctoral dissertation, Certec, Department of Design Sciences, Lund University.
- Neveryd, H., Efrting, H. & Bolmsjö, G. (1999). *The Swedish experience of Rehabilitation Robotics*. Proceedings of Workshop Rehabilitation Robotics, pp 49-54, Hoensbroek, The Netherlands.
- Efrting, H. & Boschian, K. (1999). *Technical results from Manus user trials*. Proceedings of the 6th International Conference on Rehabilitation Robotics (ICORR), pp 136-141, California, USA.
- Jönsson, B., Anderberg, P., Efrting, H. & Falkvall, J. (1997). *IT, Disabilities, Research and the Process of Learning*. The 4th European Conference for the Advancement of Assistive Technology (AAATE), Vol. 3, pp 72-76, Thessaloniki, Greece.
- Neveryd, H., Efrting, H., Anderberg, P. & Jönsson, B. (1996). *Creating a University for Everyone*. Proceedings of the 5th International Conference on Computers for Handicapped Persons (ICCHP), pp 325-328, Linz, Austria.
- Bolmsjö, G., Neveryd, H. & Efrting, H. (1995). *Robotics in Rehabilitation*. IEEE Transactions on Rehabilitation Engineering, vol 3, no 1, pp 77-83.
- Jönsson, B., Magnusson, C. & Efrting, H. (1995). *Capturing better data: The potential for better insight into user's requirements through iterative prototyping*. UserTalk, Issue 6, pp 4-5.
- Jönsson, B., Magnusson, C., Efrting, H. & Svensk, A. (1995). *(Re)habiliteringsteknisk forskning (Rehabilitation Engineering Research)*. Socialmedicinsk Tidskrift, vol 72, no 6-7, pp 224-230.
- Efrting, H. (1994). *Projektarbeten i rehabiliteringsteknik 1991 - 1993 (Student projects in rehabilitation engineering 1991 - 1993)*. Internal report from Certec, LTH 2:94.
- Efrting, H. (1994). *Robot control methods using the RAID workstation*. Proceedings of the 4th International Conference on Computers for Handicapped Persons (ICCHP), pp 120-128, Vienna, Austria.
- Efrting, H. (1994). *Robot control methods and results from user trials on the RAID workstation*. Proceedings of the 4th International Conference on Rehabilitation Robotics (ICORR), pp 97-101, Wilmington, Delaware, USA.
- Efrting, H. & Neveryd, H. (1993). *Rehabilitation Robotics at CERTEC*. Proceedings of the 2nd Nordic Workshop on Rehabilitation Robotics, Orup, Sweden.
- Efrting, H. (1993). *RAID - A Robotic Workstation for the Disabled*. Proceedings of the IXth Nordic Meeting on Medical and Biological Engineering, p 121, Lund, Sweden.
- Efrting, H. & Bolmsjö, G. (1993). *RAID - A Robotic Workstation for the Disabled*. Proceedings of the 2nd European Conference on the Advancement of Rehabilitation Technology (ECART 2), pp 24.3, Stockholm, Sweden.
- Bolmsjö, G. & Efrting, H. (1993). *RAID Robotic end-effector developments*. Proceedings of the 1st TIDE Congress, pp 108-112, Brussels, Belgium.
- Efrting, H. (1991). *Så här har vi överfört SIM till industrin*. IVF-rapport 91043. TRITA LVE - 9106.
- Efrting, H. (1991). *Verktogsplanering med MAP-kommunikation*. IVF-rapport 91032. TRITA LVE - 9105.
- Efrting, H. (1991). *Simplified Integrated Manufacturing: Från idé till industriell användning*. IVF-rapport 91014. TRITA LVE - 91014.
- Efrting, H. (1990). *Förbättrade CAD/CAM-system ger ökad produktflexibilitet i robotbetjänade fleroptionsmaskiner*. Licentiate thesis, Department of Manufacturing Systems, Royal Institute of Technology, 1990. TRITA-LVE 5202, ISSN 0280-2074.
- Efrting, H. (1990). *The Development of CAD/CAM for fast adaption of FMS to Just-In-Time Production*. CIRP Manufacturing Systems, vol 19, no 4, pp 283-291.
- Bjarre, U., Efrting, H., Hasselkvist, B.O. & Persson, J. (1989). *Irb-betjänad fleroptionsmaskin med automatisk omställning*. IVF-rapport ST 8904. TRITA LVE - 2602.
- Efrting, H. & Palm, G. (1988). *Framtagning av strypprogram för en FMS-CELL med hjälp av geometriska produktmodeller, eller en koppling mellan CAD/CAM och FMS*. Rapport från IVF-KTH-verksamheten. TRITA-LVE 5201.