

# Publication list for Bengt Sandblad

## PhD thesis

Bengt Sandblad

Simulation models for planning of health care service activities.

Uppsala University 1977.

## *Publications after dissertation*

### International journals with referees

H.P. Meinzer and B. Sandblad

Data security in information systems by language analysis.

Comp. Prog. in Biomed. 10 (1979) 175-181.

B. Sandblad

The interaction of new instruments with laboratory infra-structure.

J. of Autom. Chem. Vol. 2, No 1, Jan 1980, 28-31.

H.P. Meinzer and B. Sandblad

A simulation model for studies of the intestine cell dynamics.

Comp. Meth. and Prog. in Biomed., Vol 21, 89-98, 1985

H.P. Meinzer and B. Sandblad

Evidence for cell generation controlled proliferation.

Cell and Tissue Kinetics, vol 19, 581-590, 1986.

P.J. Jasinski, H.P. Meinzer, C.O. Köhler and B. Sandblad

An approach to Integrate Collections of Images and Relational Databases

Meth. of Information in Medicine (1988) 177-183

H.P. Meinzer, W.Chen and B. Sandblad

The cell cycle time in intestinal crypts by simulation of FLM-experiments.

Cell and Tissue Kinetics, 1988, 21, 429-436.

W.Chen, H.P. Meinzer and B. Sandblad

The Growth and Life of a monoclonal Crypt. Cell and Tiss. Kin., 1988, 21, 419-427.

B. Sandblad, H.P. Meinzer

Modelling and Simulation of Complex Control Structures in Cell Biology .

Meth. Inform. Med. 1992, 31, 36-43.

H.P. Meinzer, B. Sandblad

Generation dependent control mechanisms in cell proliferation and differentiation.

Cell Proliferation (25), 1992.

Degoulet, P., Jean, F-C., Engelmann, U., Meinzer, H.P., Baud, R., Rassinoux, A.M., Jagermann, C., Sandblad, B., Cordelle, D., Wiegertz, O.  
Environnement de génie logiciel médical Helios.  
Informatique & Santé 15 (1993) 57-60.

E. Borälv, B. Göransson, E. Olsson, B. Sandblad  
Usability and efficiency. The HELIOS approach to development of user  
interfaces. CMPBEK (Computer methods and programs in biomedicine) 45,1994.

E. Borälv, B. Göransson, E. Olsson, B. Sandblad  
Documentation and information services in the HELIOS project.  
CMPBEK (Computer methods and programs in biomedicine) 45 (suppl.), 1994.

Degoulet, P., Jean, F-C., Engelmann, U., Meinzer, H.P., Baud, R., Sandblad, B.,  
Wiegertz, O., Le Meur, R., Jagermann, C.  
The component-based architecture of the HELIOS medical software engineering.  
CMPBEK, Computer methods and programs in biomedicine, 45, 127-138, Elsevier,  
Amsterdam 1994.

Gulliksen J., Sandblad B.  
Domain Specific Design of User Interfaces.  
International Journal of Human-Computer Interaction, Vol. 7, No. 2, pp. 135-151, Ablex  
Publishing Corporation, Norwood, New Jersey. 1995.

Gulliksen, J., Lif, M., Sandblad, B., Lind, M., Nygren, E.  
Analysis of Information Utilisation.  
International Journal of Human-Computer Interaction. 9(3), 1997

M. Lif, E. Olsson, J. Gulliksen and B. Sandblad  
Workspaces enhance efficiency. Theories, concepts and a case study.  
Information Technology and People, 14, nr 3, 2001.

Åborg, Carl. Sandblad, Bengt, Gulliksen, Jan & Kavathatzopoulos, Iordanis  
Systemutveckling och arbetsmiljö: Att förebygga hälso- och arbetsmiljöproblem vid  
datorstött arbete genom bättre systemutveckling.  
Arbete-Människa-Miljö. Nordisk Ergonomi 2001.

Carl Åborg, Bengt Sandblad, Jan Gulliksen, Magnus Lif  
Integrating work environment considerations into usability evaluation methods - the  
ADA approach. Interacting with computers 15 (2003) 453-471

B Sandblad, J Gulliksen, C Åborg, I Boivie, J Persson, B Göransson, I Kavathatzopoulos,  
S Blomkvist and Å Cajander  
Work environment and computer systems development.  
Behaviour & Information Technology, Nov.–Dec. 2003, Vol. 22, No. 6, 375–387

Walldius, Å., Sundblad, Y., Sandblad, B., Bengtsson, L., & Gulliksen, J. (2009). User certification of Workplace Software – Assessing both Artefact and Usage. *Behaviour & Information Technology*, Vol. 28, Issue 2, 2009.

Gulliksen, J., Cajander, Å., Sandblad, B., Eriksson, E. and Kavathatzopoulos, I. User-Centred Systems Design as Organizational Change: A Longitudinal Action Research Project to Improve Usability and the Computerized Work Environment in a Public Authority. *International Journal of Technology and Human Interaction*, 5, 3 (2009), 13-53.

## **Books and conference proceedings with referees.**

W. Schneider and B. Sandblad

A new approach to a computer based system for modelling and simulation.

In Alperovitch, de Dombal, Grémy eds.

Evaluation of efficacy of medical action, North Holland Publ Co, 1979.

S. Bengtsson, B. Sandblad, W. Schneider, W.A. Spencer

Effectiveness studies in connection with health care service functions.

In Alperovitch, de Dombal, Grémy eds.

Evaluation of efficacy of medical action, North Holland Publ Co, 1979.

B. Sandblad et al

Planning of oncological care, based on simulations of care programs.

Medinfo 80, North Holland Publ. Co. 1980

B. Sandblad, L. Gustafsson et al

The role of modelling in care system planning and care evaluation.

Lecture Notes in Medical Informatics 16, MIE 82. Springer Verlag 1982.

L. Gustafsson, B. Sandblad et al.

Natural history models in cancer care evaluation and planning.

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W. Schneider, M. Lind and B. Sandblad

Human cognition and human computer interaction.

Readings in Cognitive Ergonomics - Mind and Computers.

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Meinzer, H.P., Götz, Th., Sandblad, B., Zajicek, G.:

Ein simulationsmodell der Kinetik in Dünndarmkrypten. In Köhler et al (ed.) Der Beitrag der Informationsverarbeitung zum Fortschritt der Medizin. 445-456, Springer,

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B. Sandblad, M. Lind and W. Schneider

Requirements for human computer interfaces in medicine.

Communication in Health Care, North Holland Publ. Co. 1985

A. Liss, T. Möller, B. Sandblad et al.

A simulation based system for regional planning of care resources in oncology.

Medinfo 86, North Holland Publ. Co. 1986.

B. Göransson, M. Lind, E. Pettersson, B. Sandblad and P. Schwalbe  
The interface is often not the problem. CHI'87, Toronto, 1987.

Chen, W., Meinzer, H.P., Sandblad, B.  
Computer Simulation Models of the Dynamic Process in the Gastrointestinal Tract. Grain  
Count and Labelling Cell Index. MIE-88, Reicherts et al (eds), Lecture Notes in Medical  
Informatics 35, 352-356, Springer, Berlin-Heidelberg 1988.

H.P. Meinzer, B. Sandblad  
Cell generation controlled proliferation.  
16th Meeting of the European Study Group for Cell Proliferation.  
Milano, Maj 3-6, 1989.

H.J. Baur, W. Chen, H.P. Meinzer and B. Sandblad  
On the non-symmetric division of stem cells in epithelial tissue.  
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B. Sandblad  
Software requirements for design and development of efficient user interfaces.  
SEMI, IMIA working conference on software engineering in medical informatics. Amsterdam,  
8-10 Oct. 1990.

Lind M., Pettersson E., Sandblad B., Schneider W.  
Computer based workstations in health care.  
IMIA Working Conference "Towards new hospital information systems".  
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Baur, H.J., Meinzer, H.P., Bär, R., Sandblad, B.  
Modellierung der Steuerungsmechanismen im Darmepithel. GMDS Berlin, In Überla, K.,  
Rienhoff, O., Victor, N. (eds) Medizinische Informatik und Statistik 72, 375-380,  
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Else Nygren, Mats Lind, Mats Johnson, Bengt Sandblad  
The art of the obvious.  
Proceedings of CHI'92, Monterey, California, 1992.

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Design of human-computer interfaces in health care,  
based on task analysis and theories of human cognition.  
Proceedings of Medinfo 92, North Holland 1992.

J. Gulliksen, M. Johnson, M. Lind, E. Nygren and B. Sandblad.  
The need for new application specific interface elements.  
In G. Salvendy and M.J. Smith eds. Proceedings of HCI International'93, pp.15-20,  
Elsevier 1993.

E. Olsson, B. Göransson, E. Borälv and B. Sandblad  
Domain Specific Style Guides - Design and Implementation.  
1993 OSF/COSE Conference, Washington, USA.

Baur, H.J., Werner, O., Meinzer, H.J., Sandblad, B.  
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C. Åborg, B. Sandblad  
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Arbetsmiljöfonden, 1994.

Degoulet, P., Jean, F-C., Engelmann, U., Meinzer, H.P., Baud, R., Jagermann, C.,  
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In A.G. Sutcliffe, F. Van Assche, & D. Benyon (eds.). Domain Knowledge for Interactive  
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Gulliksen, J., Lind, M., Lif, M. & Sandblad, B.  
Efficient Development of Organisations and Information Technology – A Design  
Approach. In Y. Anzai and K. Ogawa (eds.) Symbiosis of Human and Artifact.  
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Yokohama, Japan 9 - 14 July 1995. Elsevier.

Jan Gulliksen, Bengt Sandblad, Mats Lind  
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In A.G. Sutcliffe, F. Van Assche, & D. Benyon (eds.). Domain Knowledge for Interactive  
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B. Sandblad  
Interdisciplinary research in practice at CMD, Uppsala University.  
Proceedings of Interact'97. Sydney, Australia, July 1997.

A. W. Andersson, B. Sandblad, P. Hellström, I. Frej, A. Gideon:  
A systems analysis approach to modelling train traffic control. Proceedings of WCRR

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Proceedings of WCRR '97, Florence, November 16-19, 1997.

P. Hellström, I. Frej, A. Gideon, B. Sandblad:  
Algorithms and control systems for computer-aided train dispatching.  
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Atmosfär och subjektiva värden hos datorgränssnitt (Meta issues and subjective values in Graphical User Interfaces)., Designjournalen vol.4, nr.2, s. 13 - 18, ISSN 1400-8963, Stockholm, December 1997.

Andersson, A.W., Sandblad, B. and Nilsson, A.  
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Proceedings of COMPRAIL 98, Lisbon, September 2-4, 1998.

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Proceedings of COMPRAIL 98, Lisbon, September 2-4, 1998.

C. Åborg, B. Sandblad  
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Systemutveckling och arbetsmiljö. Att förebygga hälso- och arbetsmiljöproblem vid datorstött arbete genom bättre systemutveckling.  
Proceedings of Nordiska Ergonomisällskapets konferens 23-25 Oktober 2000.

Kecklund, L., Ingre, M., Kecklund, G., Söderström, M., Åkerstedt, T., Lindberg, E., Jansson, A., Olsson, E., Sandblad, B. & Almqvist, P.  
Railway safety and the train driver information environment and work situation.  
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Bengt Sandblad, Arne Andersson, Karl-Einar Jonsson, Peter Hellström, Per Lindström, Johnny Rudolf, Joakim Storck, Magnus Wahlborg  
A train traffic operation and planning simulator  
Computers in Railways VII, WIT-Press, 2000.

Bengt Sandblad, Arne W. Andersson and Karl-Einar Jonsson  
New operator user interfaces for train traffic control  
Computers in Railways VII, WIT-Press, 2000.

M. Grimm, B. Sandblad  
Simulation of different railway signaling systems.  
Computers in Railways VII, WIT-Press, 2000.

B. Sandblad, C. Åborg  
Reducing IT-related work environment problems by better methods for systems development.  
Proceedings of ICOH 2000, Singapore, aug. 2000.

Sandblad B, Andersson AW, Byström J, Kauppi A. New control strategies and user interfaces for train traffic control. Proceedings of COMPRAIL 2002, Lemnos, Greece, June 12-14, 2002.

Bengt Sandblad, Peter Hellström  
Framtida tågtrafikstyrning. Styrprinciper, användargränssnitt, beslutsstöd och simulatorhjälpmedel.  
Tarnsportforum 2002, Linköping, januari 2002.

Thomas Kvist, Peter Hellström, Bengt Sandblad, Jan Byström  
Decision support in the train dispatching process.  
COMPRAIL 2002, Lemnos, Grekland, juni 2002.

Bengt Sandblad  
Nya styrsystem för framtida operativ trafikplanering  
Transportforum 2003, Linköping, januari 2003.

Future train traffic control, control by re-planning  
Arvid Kauppi, Johan Wikström, Peter Hellström, Bengt Sandblad, Arne W. Andersson  
European Conference on Rail Human Factors, York, oktober 2003

Johan Wikström, Arvid Kauppi, Peter Hellström, Arne Andersson, Bengt Sandblad  
Train traffic control by re-planning in real-time  
COMPRAIL 2004, Dresden, Germany, may 2002.  
Proceedings of Comprail 2004, Wessex Institute of Technology, 2004.

Aake Walldius, Yngve Sundblad, Lars Bengtsson, Torbjörn Lind, and Bengt Sandblad,  
User-driven quality certification of workplace software, the UsersAward experience,  
Proceedings Work With Computing Systems 2004 (WWCS'04), Kuala Lumpur, Juni-Juli 2004

Bengt Sandblad  
IT-supported work. Work environment problems and health costs.  
UITQ 2005. User-driven IT Design and Quality Assurance.  
Stockholm, May 24-25 2005  
<http://www.nada.kth.se/~yngve/UITQproceedings2005.pdf>



Bengt Sandblad, Arne W Andersson, Arvid Kauppi and Johan Wikström.  
Implementation of a test system for evaluation of new concepts in rail traffic planning and control.  
2nd European Conference on Rail Human Factors, London, 2005

Arvid Kauppi, Johan Wikström, Bengt Sandblad and Arne W. Andersson.  
Future train traffic control: control by re-planning.  
Cognition, Technology & Work, Vol 8, No 1, 2006, 50 – 56.  
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Johansson N, Lind T, och Sandblad B.  
Usability in IT Systems for Mobile Work.  
In Andriessen E. and Vartiainen M eds., Mobile Virtual Work: A New Paradigm?  
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Sandblad, B., Andersson, A.W., Kauppi, A. and Wikström, J.  
Implementation of a Test System for Evaluation of New Concepts in Rail Traffic Planning and Control. In: Wilson, J., Norris, B., Clarke, T. and Mills, A. eds.: People and Rail Systems. Human Factors at the Heart of the Railways. Ashgate Publ. Comp., 2007

B Sandblad, A W Andersson, A Kauppi, G Isaksson-Lutteman  
Development and implementation of new principles and systems for train traffic control in Sweden.  
Proceedings of Comprail 2008, Toledo, Spain

G Isaksson-Lutteman, A Kauppi, A W Andersson, B Sandblad, and M Erlandsson  
Operative tests of a new system for train traffic control.  
Rail Human Factors 2009, Lille, France, March 2009.

A W Andersson, G Isaksson-Lutteman, A Kauppi and B Sandblad  
Automated functions in train traffic control. Problems and solutions.  
Rail Human Factors 2009, Lille, France, March 2009.

## **Technical reports and other non-refereed publications**

R. Allard, M. Lind, B. Sandblad and W. Schneider  
Sjukvårdsarbetet och datorn. (Health care work and the computer)  
Sjukvårdsarbetet och datorn - Sammanfattning och checklista.  
Arbetslivscentrum, forskningsrapport 45, 1984.

B. Sandblad m.fl.  
DAISY-projektet. Om organisation och datorer i vården.  
7 st delrapporter. (About organisation and computers in health care)

Rapport från ett projekt finansierat av Arbetsmiljöfonden 1987.  
Stockholms läns landsting, Uppsala läns landsting, Hälso- och sjukvårdsavdelningen.

Bengt Sandblad

Arbetsorganisation och informationshantering. Ett helhetsperspektiv på verksamheten vid systemutveckling. (Work organisation and computer supported work)

CMD-rapport nr 11/91

Bengt Sandblad

Användarstyrd systemutveckling I.

Verksamhetsanalys och förväntningsanalys. (Task and expectation analysis)

CMD-rapport nr 12/91

Bengt Sandblad

Användarstyrd systemutveckling II. (Experimental development and task analysis)

Experimentella utvecklingsmodeller och kravspecifikation i verksamhetstermer.

CMD-rapport nr 13/91

Bengt Sandblad

Användarstyrd systemutveckling III.

Metoder och erfarenheter från försöksverksamhet., CMD-rapport nr 14/91

Else Nygren, Bengt Sandblad, Mats Lind

Informationsanvändningsanalys och gränssnittsdesign.

(Analysis of information utilisation and interface design)

En metodansats. CMD-rapport nr 15/91

Bengt Sandblad, Mats Lind och Else Nygren,

Kognitiva arbetsmiljöproblem och gränssnittsdesign. CMD-rapport nr 20/91

Else Nygren, Mats Lind, Bengt Sandblad

Utformning av användargränssnitt II.

Förslag till en uppsättning av byggbara dialogelement.

Implementationsmöjligheter och problem. CMD-rapport nr 27/91

Sandblad, B., Gulliksen, J., & Lif, M.

Work Spaces and Documents in User Interface Design

Report no. 66/96 from Uppsala University Center for Human-Computer Studies,

Uppsala, Sweden.

Jan Gulliksen, Bengt Sandblad, Magnus Lif, Eva Olsson

Domain Specific Design in Practice: Tax Handling Work

Report no. 67/96 from Uppsala University Center for Human-Computer Studies,

Uppsala, Sweden.

Lif, M., Gulliksen, J., Lind, M., & Sandblad, B.  
A Structural Approach to Prototype Design in Iterative System Development.  
CMD Report no. 69/96 from Uppsala University, Uppsala, Sweden.

Arne W. Andersson, B. Sandblad  
Människa-maskinfrågeställningar vid tågtrafikstyrning. Rapport från en förstudie.  
(Human-machine problems in train traffic control). In Swedish.  
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December 1996.

Arne W. Andersson, B. Sandblad  
Människa-maskinfrågor i samband med snabb fartygstrafik.  
(HMI-problems in control of high speed ships). Projektrapport november 1998. Avd. för  
människa-datorinteraktion, Uppsala universitet.

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Människa-maskininteraktion och gränssnittsutformning i samband med tågtrafikstyrning.  
Slutrapport februari 1999. (HMI and operator interface design in train traffic control).  
Banverket och avd. för människa-datorinteraktion, Uppsala universitet. (In Swedish)

Slutrapporter från FTTS-projektet. See: <http://www.it.uu.se/research/project/fts/reports>

Sandblad B.  
IT-stöd i arbetet - utveckling, införande och arbetsmiljö.  
Synopsis, aktuell forskning för statsförvaltningen, nr 8. KKR, Stockholm 2005.