

ABRIDGED CURRICULUM VITAE

Prof. Dr. Techn. Mads Nygård Dean of Engineering Education, NTNU

PERSONAL INFO	Norwegian, Born 1953 Divorced, No Children
POSITION	Dean, NTNU (50%) Full Professor, IDI / NTNU (50%)
EDUCATION	1990 Dr. Techn. (D.Sc.), IDT / NTH 1982 Dr. Ing. (Ph.D.) - Course Part only, IDB / NTH 1979 Siv. Ing. (M.Sc.), IDB / NTH
FULL TIME EXPERIENCE	09-... Dean, NTNU (Engineering Education) 97-... Full Professor, IDI / NTNU (Called to Position) 83-97 Section Head / Research Manager / Principal Research Scientist / Research Scientist, SINTEF (Several departments) 79-83 Assistant Professor / University Fellow, IDB / NTH
PART TIME EXPERIENCE	97-06 Adjunct Professor (20%), IED / UIS (Called to Position) 94-97 Adjunct Professor (20%), IMF / UMB
SABBATICAL STAYS	07-07 Visiting Professor, Univ. of Oxford - Oxford, England 07-07 Visiting Professor, Univ. of Rome - Rome, Italy 06-06 Visiting Professor, Univ. of Nice - Nice, France 01-01 Visiting Professor, Imperial College - London, England 00-00 Visiting Professor, Univ. of Cape Town - Cape Town, South Africa
SABBATICAL VISITS	07-07 Visiting Professor, Joseph Fourier University - Grenoble, France 07-07 Visiting Professor, Aarhus University - Aarhus, Denmark 06-06 Visiting Professor, Georgia Inst. of Technology - Atlanta, USA 02-03 Visiting Professor, Univ. of Maryland - Maryland College Park, USA 02-03 Visiting Professor, Georgetown University - Washington D.C., USA
FULL TIME UNDP WORK	88-88 Visiting Faculty, Asian Inst. of Technology - Bangkok, Thailand 84-84 Visiting Faculty, Beijing Inst. of Software - Beijing, China
PART TIME INT. WORK	96-98 Evaluator, TRENDS Research Project, EU 95-97 Participator, ACTRANS Research Project, EU 89-93 Member, MC5 Task Force, OECD 82-83 Participator, DDB Research Project, EU
EVALUATION 2002	IDI/NTNU found to be of Excellent Quality in an International Evaluation
NUMBERS 1992-2011	International Publications: 77 National Publications: 92 Organization Committee Chair Appointments - International Conferences: 7 Organization Committee Member Appointments - International Conferences: 5 Program Committee Chair Appointments - International Conferences: 3 Program Committee Member Appointments - International Conferences: 19 Workshop Organizing Appointments - International Conferences: 2 Session Organizing Appointments - International Conferences: 4 Session Chairman Appointments - International Conferences: 13

Further Article Reviewer Appointments - International Journals: 3
 Further Paper Reviewer Appointments - International Conferences: 4
 Best Paper Awards - International Conferences: 2
 Evaluation Committees - International Educ. Programs (Chairman/Vice-Chair.): 2
 Evaluation Committees - Full Professorships (Chairman/Member): 7
 Evaluation Committees - Associate Professorships (Chairman/Member): 6
 Evaluation Committees - PhD Theses (Chairman/Member): 8

Supervision - PhD Students: 11
 Supervision - MSc Diploma Students: 24
 Supervision - MSc Project Students: 34
 Lecturing - PhD/MSc Courses: 85
 Chairing - MSc Student Excursions: 2

**SPECIAL
ACTIVITIES**

09-... Chairman - Executive Board for Engineering Education, NTNU
 02-06 Member - Executive Board for Engineering Education, NTNU
 08-09 Member - Process Council, NTNU
 99-05 Member - Board of Directors, IDI
 81-83 Member - Faculty Council, FIM

02-06 Member - Educational Board, IME
 98-06 Chairman/Member - Educational Board, IDI
 02-06 Chairman - Educational Board, IME-Computer Science
 02-06 Member - Educational Board, IME-Telecommunication
 97-02 Chairman/Member - Educational Board, FIM-Computer Science
 98-02 Member - Educational Board, FIM-Mathematics/Physics
 98-02 Member - Educational Board, FIM-Non Technical
 79-81 Member - Educational Board, IDB

05-... Chairman/Vice-Chairman/Member - Board of Directors, UNIK
 89-93 Member - Board of Directors, SINTEF

09- Chairman of the Executive Board, NRT
 09- Member of the Publication Council, UHR
 09- Member of the National Forum for Natural Sciences, KD

10- Member of the Executive Board & the Board of Directors, CESAER
 09- Member of the Executive Board, NORDTEK
 10- Chairman of the Educational Board, N5T

07-... Vice-President/Member - Board of Directors, TEKNA-NORWAY
 05-08 Member - Negotiation Board, TEKNA-NORWAY
 02-08 Vice-Chairman/Member - Public Sector's Board, NIF-N. / TEKNA-N.
 97-99 Member - Board of Directors, NIF-NORWAY
 93-99 Chairman/Member - Technical Board, NIF-NORWAY
 90-93 Member - Private Sector's Board, NIF-NORWAY
 92-97 Chairman/Member - Regional Sector's Board, NIF-TRONDHEIM
 87-90 Chairman/Member - Corporate Board, NIF-SINTEF

MAIN FIELDS

Database Systems, Operating Systems,
 Distributed Computing, Parallel Processing,
 Transportation Informatics, Knowledge Engineering &
 Geographical Information Systems

**CURRENT
NTNU COURSES**

Transaction Processing - MSc, 3.75W, 100%
 Distributed Database Systems - PhD, 7.5W, 100% (Biannually)

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Mail address: mads.nygaard@idi.ntnu.no
Web address: <http://www.idi.ntnu.no/~mads>
Postal address: IDI / NTNU, N-7491 Trondheim, Norway

REFERENCES University: Rector Torbjørn Digernes, NTNU
Industry: Director Marianne Harg, Ergo Group

PROFESSIONAL MEMBERSHIP NIF / TEKNA: Norw. Society of Chartered Engineers /
Norw. Society of Chart. Technical and Scientific Professionals
With Honorary Prize Awarded 2002

LANGUAGES English (fluent), German, French (limited)

LAST UPDATED 31.03.2011

INTERNATIONAL PUBLICATIONS - 1992-2011 - MADS NYGÅRD

2011

- (1) Feng Luan, Mads Nygård:
“**MMET: A Migration Metadata Extraction Tool for Long-term Preservation Systems**”;
In Proc DICTAP’2011: Internat. Conference on Digital Information and Communication Technology and its Applications, *Dijon – France*
- (2) Jianqiang Ma, Mads Nygård et. all. (four authors in total):
“**Assessment of the Trustworthiness of Digital Records**”;
In Proc IFIPTM’2011: 5th IFIP Internat. Conference on Trust Management, *Copenhagen – Denmark*

2010

- (3) Feng Luan, Mads Nygård:
“**Records Transition Survival – When Used over Several Decades**”;
In Proc ICDL’2010: 3rd Internat. Conference on Digital Libraries, *New Delhi – India*
- (4) Feng Luan, Mads Nygård, Thomas Mestl:
“**A Mathematical Framework for Modelling and Analyzing Migration Time**”;
In Proc JCDL’2010: 10th Joint Conference on Digital Libraries, *Brisbane – Australia*
- (5) Feng Luan, Thomas Mestl, Mads Nygård:
“**Quality Requirements of Migration Metadata in Long-term Digital Preservation Systems**”;
In Proc MTSR’2010: 4th Metadata and Semantics Research Conference, *Madrid – Spain*
- (6) Erlend Tøssebro, Mads Nygård:
“**Representing Topological Relationships for Spatiotemporal Objects**”;
Accepted for Publication in *Journal GEOINFOMATICA*
- (7) Feng Luan, Mads Nygård, Thomas Mestl:
“**A Survey of Digital Preservation Strategies**”;
Accepted for Publication in *Journal WORLD DIGITAL LIBRARIES*
- (8) Jianqiang Ma, Mads Nygård et. all. (four authors in total):
“**Development and Validation of Requirements for Evidential Value for Assessing Trustworthiness of Digital Records over Time**”;
Accepted for Publication in *Journal INFORMATION*
- (9) Waleed Smari, Sandro Fiore, Mads Nygård:
“**Advances in High Performance Computing and Simulation**”;
Accepted for Publication as *Book*

2009

- (10) Feng Luan, Mads Nygård et. all. (four authors in total):
“**The Challenges of Migration as a Long-term Preservation Strategy: The Findings of TEAM Norway and LongRec**”;
In Proc IPP’09: 1st Internat. Symposium of the InterPares Project, *Seoul – South Korea*
- (11) Jianqiang Ma, Mads Nygård et. all. (four authors in total):
“**Requirements for Evidential Value for the Assessment of the Trustworthiness of Digital Records over Time**”;
In Proc TSP’2009: 2nd IEEE Internat. Symposium on Trust, Security and Privacy for Pervasive Applications, *Macao – China*
- (12) Mads Nygård:
“**Research and Higher Education**”;
Invited Talk – *TransAtlantic Science Week, University of Minnesota, Minneapolis - USA*

2008

- (13) Alf Inge Wang, Mads Nygård et. all. (six authors in total):
“**From Scenarios to Requirements in Mobile Client-Server Systems**”;
In Book *Designing Software-Intensive Systems: Methods and Principles, Pages 80 - 101 (22 pages)*, *Information Science Reference, Hershey – USA*

- (14) Birgitta Stymne, Mads Nygård, Kai Borre:
“International Evaluation of Norwegian Engineering Degree Programmes – Volume I:IV”;
NOKUT – Norwegian Evaluation Institute, Oslo – Norway
- (15) Erlend Tøssebro, Mads Nygård:
“Representing Uncertainty in Spatial Databases”;
In Proc. HPCS’2008: 6th Internat. Conference on High Performance Computing and Simulation, Nicosia – Cyprus
- (16) Erlend Tøssebro, Mads Nygård:
“Computing the Probabilities of Operations in Vector Models for Uncertain Spatial Data”;
In Proc. SITIS’2008: 4th Internat. Conference on Signal Image Technology and Internet Based Systems, Bali – Indonesia
- (17) Hien Nam Le, Mads Nygård:
“A Transaction Framework for Mobile Data Sharing Services”;
In Proc. UBIComm’2008: 2nd Internat. Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, Valencia – Spain
- 2007
- (18) Hien Nam Le, Mads Nygård:
“A Transaction Model for Supporting Mobile Collaborative Works”;
In Proc. CTS’07: 7th Internat. Symposium on Collaborative Technologies and Systems, Orlando – USA
- (19) Hien Nam Le, Mads Nygård:
“A Mobile Database Sharing Protocol to Increase Data Availability in Mobile Environments”;
In Proc. DBMAN 2007: 1st Internat. Workshop on Database Management and Application over Network, Huangshan – China
- (20) Mads Nygård:
“Peer-to-peer Technology: Where Is It Heading?”;
Invited Talk – In Proc. WETICE 2007: 16th IEEE Internat. Workshop on Enabling Technologies: Infrastructures for Collaborative Enterprises, Paris – France
- (21) Mads Nygård:
“The Mobility Issues of Transaction Processing”;
Invited Talk – Department of Informatics, University of Nice, Nice - France
- (22) Mads Nygård:
“Some Mobility Issues of Collaborative Work”;
Invited Talk – Department of Computer Science, University of Grenoble, Grenoble - France
- (23) Mads Nygård:
“Mobility: Transactional Issues in Collaborative Works”;
Invited Talk – Department of Informatics, University of Rome, Rome - Italy
- (24) Mads Nygård:
“Mobility: Collaboration and Transactional Aspects”;
Invited Talk – Department of Computer Science, University of Aarhus, Aarhus - Denmark
- 2006
- (25) Mads Nygård, Christian Thune:
“International Benchmarking of Danish Computer Science Programmes”;
EVA – Danish Evaluation Institute, Copenhagen – Denmark
- (26) Erlend Tøssebro, Mads Nygård:
“Representing Topological Relationships for Moving Objects”;
In Proc. GIScience’2006: 4th Internat. Conference on Geographical Information Science, Münster – Germany

- (27) **Mads Nygård, Hien Nam Le:**
 “Transaction Processing with Mobile Collaborative Works”;
 Invited Talk - In Proc. MOBCOPS'2006: 1st Internat. Workshop on Mobile Collaborative Applications and Systems, Atlanta – USA
- 2005
- (28) **Klemens Böhm, Mads Nygård:**
 “Conference Brochure”;
 31st Internat. Conference on Very Large Data Bases, Trondheim – Norway
- (29) **Hien Nam Le, Mads Nygård:**
 “Mobile Transaction System for Supporting Mobile Work”;
 In Proc. DEXA'2005: 16th Internat. Conference on Database and Expert Systems Applications, Copenhagen – Denmark
- (30) **Hien Nam Le, Mads Nygård:**
 “A Mobile Affiliation Model for Supporting Mobile Collaborative Work in Mobile Environments”;
 In Proc. UMICS'2005: 16th CAISE Workshop on Ubiquitous Mobile Information and Collaboration Systems, Porto – Portugal
- (31) **Alf Inge Wang, Mads Nygård et. all. (six authors in total):**
“Using the MOWAHS Characterisation Framework for Development of Mobile Work Applications”;
 In Proc. PROFES'2005: 6th Internat. Conference on Product Focused Software Process Improvement, Oulu – Finland
- 2004
- (32) **Heri Ramampiaro, Mads Nygård:**
 “CAGISTrans: Providing Adaptable Transactional Support for Cooperative Work – An Extended Treatment”;
 In Journal ITM: Information Technology and Management Journal, Volume 05 (2004), Pages 23 - 64 (42 pages), Kluwer Academic, Norwell - USA
- (33) **Erlend Tøssebro, Mads Nygård:**
 “Computing Probabilities of Fuzzy Set Values in Vector Models for Uncertain Data”;
 GIScience'2004: 3rd Internat. Conference on Geographical Information Science, Adelphi – USA
- (34) **Erlend Tøssebro, Mads Nygård:**
 “A Discrete Model for Topological Relationships between Uncertain Spatial Objects”;
 In Proc. SDH'04: 11th Internat. Symposium on Spatial Data Handling, Leicester – England
- (35) **Hien Nam Le, Mads Nygård et. all. (three authors in total):**
 “A Locking Model for Mobile Databases in Mobile Environments”;
 In Proc. DA'2004: Internat. Conference on Databases and Applications, Innsbruck – Austria
- (36) **Susmit Bagchi, Mads Nygård:**
 “On the Concept of Mobile Distributed Virtual Memory Systems”;
 In Proc. DSN'2004: Internat. Conference on Dependable Systems and Networks, Florence – Italy
- (37) **Susmit Bagchi, Mads Nygård:**
 “A Fuzzy Adaptive Algorithm for Fine Grained Disk Cache Paging”;
 In Proc. SCOPES'2004: 8th Internat. Workshop on Software and Compilers for Embedded Systems, Amsterdam – The Netherlands
- (38) **Susmit Bagchi, Mads Nygård:**
 “Designing the Fuzzy Adaptive Cache Swapper for an MDVM System”;
 In Proc. ICC3'04: Internat. Conference on Computational Cybernetics, Vienna – Austria
- (39) **Susmit Bagchi, Mads Nygård:**
“Designing the MDVM-Stub and Memory Estimator”;
 In Proc. IWDC'2004: 6th Internat. Workshop on Distributed Computing, Kolkata – India
- 2003
- (40) **Erlend Tøssebro, Mads Nygård:**
 “A Discrete Model for Spatial Data with Temporal Uncertainty”;
 In Proc. IKS'03: 2nd Internat. Conference on Information and Knowledge Sharing, Scottsdale – USA

- (41) **Erlend Tøssebro, Mads Nygård:**
 “A Medium Complexity Discrete Model for Uncertain Spatial Data”;
 In Proc. IDEAS’03: 7th Internat. Symposium on Database Engineering and Applications, Hong Kong – China
- (42) **Heri Ramampiaro, Mads Nygård et. all. (five authors in total):**
 “Requirement Indicators for Mobile Work - **The MOWAHS Approach**”;
 In Proc. AI’2003: Internat. Conference on Applied Informatics, Innsbruck – Austria
- (43) **Susmit Bagchi, Mads Nygård:**
 “Application Controlled IPC Synchrony – An Event Driven Multithreaded Approach”;
 In Proc. ICCS’03: Internat. Conference on Computational Sciences, St. Petersburg – Russia
- (44) **Mads Nygård:**
 “Transactional Support for Cooperative Work”;
Invited Talk - Department of Computer Science, Georgetown University, Washington D.C. - USA
- 2002
- (45) **Heri Ramampiaro, Mads Nygård:**
 “Customised Transactional Support for Cooperative Work: An Experience Paper”;
 In Proc. CTS’02: 3rd Internat. Symposium on Collaborative Technologies and Systems, San Antonio - USA
- (46) **Erlend Tøssebro, Mads Nygård:**
 “Abstract and Discrete Models for Uncertain Spatiotemporal Data”;
 In Proc. SSDBM’02: 14th Internat. Conference on Scientific and Statistical Database Management, Edinburgh – Scotland
- (47) **Erlend Tøssebro, Mads Nygård:**
 “Uncertainty in Spatiotemporal Databases”;
 In Proc. ADVIS’02: 2nd Internat. Conference on Advances in Information Systems, Izmir – Turkey
- (48) **Erlend Tøssebro, Mads Nygård:**
 “An Advanced Discrete Model for Uncertain Spatial Data”;
 In Proc. WAIM’02: 3rd Internat. Conference on Web-Age Information Management, Beijing – China
- (49) **Carl Fredrik Sørensen, Mads Nygård et. all. (six authors in total):**
 “**The MOWAHS Characterisation Framework for Mobile Work**”;
 In Proc. AI’2002: Internat. Conference on Applied Informatics, Innsbruck – Austria
- 2001
- (50) **Heri Ramampiaro, Mads Nygård:**
 “CAGIS Trans: A Transactional Framework for Cooperative Work”;
 In Proc. PDCS’01: 14th Internat. Conference on Parallel and Distributed Systems, Richardson - USA
- (51) **Heri Ramampiaro, Mads Nygård:**
 “CAGIS Trans: Providing Adaptable Transactional Support for Cooperative Work”;
 In Proc. CIST’01: 6th INFORMS Conference on Information Systems and Technology, Miami – USA
- (52) **Erlend Tøssebro, Mads Nygård:**
 “Modelling Uncertainty in Spatial and Spatiotemporal Databases”;
Invited Talk - WIM’01 Wireless Information Management, Aalborg – Denmark
- 2000
- (53) **Mads Nygård:**
 “In Search of Transactional Quarks”;
Invited Talk - Department of Computer Science, University of Cape Town, Cape Town - South Africa
- (54) **Mads Nygård:**
 “Theoretical and Applied Mathematics - A Computer Science Viewpoint”;
Invited Talk – In Proc. 1st Nordic Workshop on Mathematics Education for MSc Students, Trondheim - Norway

1999

(55) Heri Ramampiaro, Mads Nygård:

“Cooperative Database System: A Constructive Review of Cooperative Transaction Models”;
In Proc. DANTE'99: 1999 Internat. Symposium on Database Applications in Non-Traditional
Environments, Kyoto - Japan

1998

(56) Mads Nygård et. all. (three authors in total):

“The TRENDS Research Project - Report from the External Reviews”;
EU Report EU-TRENDS-98-01, Brussels - Belgium

1997

(57) Mads Nygård:

“Stepwisly Committing Transactions: How to Manage their Termination in Distributed Databases”;
*Invited Talk - Department of Computer and Information Science, Norwegian University of Science
and Technology, Trondheim - Norway*

1996

(58) Vera Goebel, Mads Nygård et. all. (four authors in total):

“OMODIS - Object-Oriented Modelling and Database Support for Distributed Multimedia Systems”;
In Proc. NIK'96: 9th Norwegian Informatics Conference, Alta – Norway [Also available as SINTEF
Report STF40 A96087]

1995

(59) Mads Nygård:

“Tailor-Made Concurrency Control - Distributed Transactions As A Case”;
In Journal AJIS: Australian Journal of Information Systems, *Volume 3, Number 1 (1995), Pages 53 -
70 (18 pages), Sydney - Australia*

(60) Agnar Aamodt, Mads Nygård:

“Different Roles and Mutual Dependencies of Data, Information and Knowledge - An AI Perspective
on their Integration”;
In Journal DKE: Data and Knowledge Engineering, *Volume 16 (1995), Pages 191 - 222 (32 pages),
North Holland Elsevier, Amsterdam - The Netherlands*

(61) Bente Gaarder Andersen, Mads Nygård et. all. (three authors in total):

“RTI / ITS in Integrated Operation - Norway's Regional Road Traffic Centres”;
In Proc. IEEE VNIS '95: 6th Internat. Conference on Vehicle Navigation & Information Systems,
Seattle - USA [Also available as SINTEF Report STF40 A95093]

1994

(62) Mads Nygård:

“Tailor-Made Concurrency Control with Specialized Distributed Transactions”;
In Proc. ACIS'94: 5th Australasian Conference on Information Systems, *Melbourne - Australia* [Also
available as SINTEF Report STF40 A94141]

(63) Mads Nygård:

“Partial Recoverability with Distributed Transactions”;
In Proc. IEEE IPCCC'94: 1994 Internat. Phoenix Conference on Computers and Communications,
Phoenix - USA [Also available as SINTEF Report STF40 A94140]

(64) Mads Nygård:

“Concurrency Control and Distributed Transactions: An Efficient Approach”;
In Proc. SCCC '94: 14th Internat. Conference of the Chilean Computer Science Society, *Conception
- Chile* [Also available as SINTEF Report STF40 A94144]

(65) Mads Nygård:

“Recovery of Distributed Transactions: A Flexible Approach”;
In Proc. SCCC '94: 14th Internat. Conference of the Chilean Computer Science Society, *Conception
- Chile* [Also available as SINTEF Report STF40 A94143]

(66) Mads Nygård:

“Reflections on State-of-the-Art within RTI / IVHS”;
In Proc. IEEE VNIS '94: 5th Internat. Conference on Vehicle Navigation & Information Systems,
Tokyo - Japan [Also available as SINTEF Report STF40 A94142]

1993

(67) Mads Nygård:

“Relaxed Criteria for Concurrency Control in Distributed Databases”;
In Proc. IFIP TC6’93 Internat. Symposium on Network Information Processing Systems, *Sofia - Bulgaria* [Also available as SINTEF Report STF40 A93160]

(68) Mads Nygård:

“Sensible Variants of Non-Serializability in Replicated Distributed Databases”;
In Proc. IFIP TC6’93 Internat. Symposium on Network Information Processing Systems, *Sofia - Bulgaria* [Also available as SINTEF Report STF40 A93161]

(69) Mads Nygård:

“Article-Acquisition: A Scenario for Non-Serializability in a Distributed Database”;
In Proc. PARLE ’93: 1993 Parallel Architectures and Languages Europe Conference, *Munich - Germany* [Also available as SINTEF Report STF40 A93152]

(70) Mads Nygård:

“Multi-Criteria: Degrees of Recoverability in Distributed Databases”;
In Proc. PARLE ’93: 1993 Parallel Architectures and Languages Europe Conference, *Munich - Germany* [Also available as SINTEF Report STF40 A93153]

(71) Mads Nygård:

“BINMOD: A Model for Non-Serializability in Distributed Databases”;
BNCOD 11: 11th British National Conference on Databases, *Stoke - England* [Also available as SINTEF Report STF40 A93150]

(72) Mads Nygård:

“VARCRIT: Degrees of Serializability in Replicated Distributed Databases”;
BNCOD 11: 11th British National Conference on Databases, *Stoke - England* [Also available as SINTEF Report STF40 A93151]

(73) Mads Nygård, Agnar Aamodt:

“Road Transport Informatics: Conceptual Framework and Technological Components”;
In Proc. IEEE VNIS ’93: 4th Internat. Conference on Vehicle Navigation & Information Systems, *Ottawa - Canada* [Also available as SINTEF Report STF40 A93146]

(74) Mads Nygård:

“Distributed Databases - Limitations and Possibilities”;
Invited Talk - IFIP TC6’93 Internat. Symposium on Network Information Processing Systems, *Sofia - Bulgaria* [Also available as SINTEF Report STF40 A93162]

1992

(75) Mads Nygård et. all. (four authors in total):

“Automatic Traffic Control in Norway - Functional and Political Issues”;
In Proc. IEEE VNIS ’92: 3rd Internat. Conference on Vehicle Navigation & Information Systems, *Oslo - Norway* [Also available as SINTEF Report STF40 A92195]

(76) Kåre Rumar, Mads Nygård et. all. (nine authors in total):

“Intelligent Vehicle Highway Systems - Theoretical Study”;
OECD Report DSTI/RTR/RVC(92)1, *Paris - France*

(77) Frank J. Mammano, Mads Nygård et.all. (eight authors in total):

“Intelligent Vehicle Highway Systems - Practical Evaluation”;
OECD Report DSTI/RTR/RVC(92)2, *Paris - France*

TWELVE SELECTED PUBLICATIONS - 1992-2011 - MADS NYGÅRD

- Jianqiang Ma, Mads Nygård et. all. (four authors in total):
“Development and Validation of Requirements for Evidential Value for Assessing Trustworthiness of Digital Records over Time”;
In Journal *INFORMATION: An Internat. Interdisciplinary Journal*, Volume 13-06 (2010) / Volume 14-01 (2011), Internat. Information Institute, Tokyo - Japan
- Alf Inge Wang, Mads Nygård et. all. (six authors in total):
“From Scenarios to Requirements in Mobile Client-Server Systems”;
In Book *Designing Software-Intensive Systems: Methods and Principles*, Pages 80 - 101 (22 pages), Information Science Reference, (2008), Hershey – USA
- Mads Nygård, Christian Thune:
“Computer Science – International Benchmarking of Danish Computer Science”;
EVA – Danish Evaluation Institute, (2006), Copenhagen – Denmark
- Hien Nam Le, Mads Nygård:
“Mobile Transaction System for Supporting Mobile Work”;
In Proc. *DEXA’2005: 16th Internat. Conference on Database and Expert Systems Applications*, Copenhagen – Denmark
- Heri Ramampiaro, Mads Nygård:
“CAGIS Trans: Providing Adaptable Transactional Support for Cooperative Work – An Extended Treatment”;
In Journal *ITM: Information Technology and Management Journal*, Volume 5 (2004), Pages 23 - 64 (42 pages), Kluwer Academic, Norwell - USA
- Susmit Bagchi, Mads Nygård:
“A Fuzzy Adaptive Algorithm for Fine Grained Disk Cache Paging”;
In Proc. *SCOPES’2004: 8th Internat. Workshop on Software and Compilers for Embedded Systems*, Amsterdam – The Netherlands
- Erlend Tøssebro, Mads Nygård:
“A Discrete Model for Spatial Data with Temporal Uncertainty”;
In Proc. *IKS’03: 2nd Internat. Conference on Information and Knowledge Sharing*, Scottsdale – USA
- Carl Fredrik Sørensen, Mads Nygård et. all. (six authors in total):
“The MOWAHS Characterisation Framework for Mobile Work”;
In Proc. *AI’2002: Internat. Conference on Applied Informatics*, Innsbruck – Austria
- Mads Nygård:
“Tailor-Made Concurrency Control - Distributed Transactions As A Case”;
In Journal *AJIS: Australian Journal of Information Systems*, Volume 3, Number 1 (1995), Pages 53 - 70 (18 pages), Sydney - Australia
- Agnar Aamodt, Mads Nygård:
“Different Roles and Mutual Dependencies of Data, Information and Knowledge - An AI Perspective on their Integration”;
In Journal *DKE: Data and Knowledge Engineering*, Volume 16 (1995), Pages 191 - 222 (32 pages), North Holland Elsevier, Amsterdam - The Netherlands
- Mads Nygård:
“Partial Recoverability with Distributed Transactions”;
In Proc. *IEEE IPCCC’94: 1994 Internat. Phoenix Conference on Computers and Communications*, Phoenix – USA
- Kåre Rumar, Mads Nygård et. all. (nine authors in total):
“Intelligent Vehicle Highway Systems - Theoretical Study”;
OECD Report DSTI/RTR/RVC(92)1, Paris - France

PERSONAL STATEMENT - MADS NYGÅRD, NTNU

KEY

QUALIFICATIONS

18 years' experience from Universities as Research Assistant, University Fellow, Assistant Professor, Visiting Faculty, Visiting Professor, Adjunct Professor, Full Professor and Dean. 14 years experience from Research Institutes as Research Scientist, Principal Research Scientist, Research Manager and Section Head. All within Computer Science. Published several research publications & development reports - and several text books & lecture notes - both nationally and internationally. Lectured several courses in universities, research establishments and computer industry, both domestic and abroad, and both at M.Sc.- and Ph.D.-level. Managed and participated in several projects, both research and development, and both nationally and internationally.

SPECIAL

ACHIEVEMENTS

- 11: *General Co-Chairman for HPCS'2011: 9th Internat. Conference on High Performance Computing and Simulation – Istanbul, Turkey*
- 11: *Program Committee Chair for CTS'11: 12th Internat. Symposium on Collaborative Technologies and Systems – Philadelphia, USA*
- 11: *Program Committee Member for RCIS'2011: 5th Internat. Conference on Research Challenges in Information Science – Guadeloupe, France*
- 11: *Program Committee Member for COPECH'2011: 2nd Internat. Track on Collaboration tools for Preservation of Environment and Cultural Heritage – Paris, France*
- 11: *Program Committee Member and Mediator for EEDC'2011: 3rd European Engineering Deans' Convention – Paris, France*
- 11: *Chairman of and Keynote Speaker at a National Expert Conference for the Preparation of a New Framework for the Bachelor of Engineering Education at the Norwegian Colleges – Oslo, Norway*
- 10: *General Co-Chairman, Keynote Chair and Banquet Chair for HPCS'2010: 8th Internat. Conference on High Performance Computing and Simulation – Caen, France*
- 10: *Program Committee Chair for CTS'10: 11th Internat. Symposium on Collaborative Technologies and Systems – Chicago, USA*
- 10: *Program Committee Member for RCIS'2010: 4th Internat. Conference on Research Challenges in Information Science – Nice, France*
- 10: *Chairman of a National Expert Conference for the Follow Up of a Joint Evaluation of the Bachelor of Engineering Education at the Norwegian Colleges – Bergen, Norway*
- 09: *General Co-Chairman, Panel Moderator and Banquet Co-Chair for HPCS'2009: 7th Internat. Conference on High Performance Computing and Simulation – Leipzig, Germany*
- 09: *Program Committee Chair and Session Chair for CTS'09: 10th Internat. Symposium on Collaborative Technologies and Systems – Baltimore, USA*
- 09: *Program Committee Member and Session Chair for RCIS'2009: 3rd Internat. Conference on Research Challenges in Information Science – Fes, Morocco*
- 08: *Acting Chairman of an International Expert Panel for a Joint Evaluation of the Bachelor of Engineering Education at the Norwegian Colleges - Oslo, Norway*

- 08: *Member of an Evaluation Committee for a Full Professorship at HIB*
- 08: *Chairman of an Evaluation Committee for a PhD Defence at UiTr (Anna-Brith Arntsen), University of Tromsø - Tromsø, Norway*
- 08: *Member of an Evaluation Committee for a PhD Defence at NTNU (Olaf René Birkeland)*
- 08: *Member of an Evaluation Committee for a PhD Defence at NTNU (Anita Ashok Gupta)*
- 08: *Member of an Evaluation Committee for a PhD Defence at NTNU (Odd Petter Nord Slyngstad)*
- 08: *General Co-Chairman and Tutorial Chair for HPCS'2008: 6th Internat. Conference on High Performance Computing and Simulation – Nicosia, Cyprus*
- 08: *Keynote Chair for ECMS'2008: 22nd European Conference on Modelling and Simulation – Nicosia, Cyprus*
- 08: *Organizing Committee Member, Program Committee Member, Awards Co-Chairman for CTS'08: 9th Internat. Symposium on Collaborative Technologies and Systems – Irvine, USA*
- 08: *Program Committee Member at COGAMES'2008: 1st Internat. Workshop on Collaborative Games – Irvine, USA*
- 08: *Program Committee Member at RCIS'2008: 2nd Internat. Conference on Research Challenges in Information Science – Marrakech, Morocco*
- 08: *Program Committee Member at ODBIS'2008: 4th ODBIS Workshop on Ontologies-based Techniques for Databases in Information Systems and Knowledge Systems – Auckland, New Zealand*
- 08: *Program Committee Member at WETICE'2008: 17th IEEE Internat. Workshop on Enabling Technologies: Infrastructures for Collaborative Enterprises – Rome, Italy*
- 08: *Internat. Advisory Board Member for ICPCM'2008: 1st Internat. Congress on Pervasive Computing and Management – New Delhi, India*
- 08: *Paper Evaluator for Semantic Web, Ontologies and Databases: Springer Lecture Notes on Computer Science – Berlin, Germany*
- 07: *Vice-Chairman of an International Expert Panel for a Joint Evaluation of the Bachelor of Engineering Education at the Norwegian Colleges – Oslo, Norway*
- 07: *General Co-Chairman and Panel Moderator for HPCS'2007: 5th Internat. Conference on High Performance Computing and Simulation – Prague, Czech Republic*
- 07: *Organizing Committee Member, Program Committee Member, International Liaison and Session Chairman for CTS'07: 8th Internat. Symposium on Collaborative Technologies and Systems – Orlando, USA*
- 07: *Organizing, Reviewing papers for and Chairing a Special Session at CTS'07: 8th Internat. Symposium on Collaborative Technologies and Systems – Orlando, USA*
- 07: *Program Committee Member and Session Chairman at RCIS'2007: 1st Internat. Conference on Research Challenges in Information Science - Ouarzazate, Morocco*
- 07: *Program Committee Member at SWDB-ODBIS'2007: 1st SWDB-ODBIS Joint Workshop on Semantic Web, Ontologies and Databases – Vienna, Austria*
- 07: *Program Committee Member at SUM'2007: 1st Internat. Conference on Scalable Uncertainty Management – Washington D.C., USA*

- 07: *Program Committee Member at COLLABORATECOM'2007: 3rd Internat. Conference on Collaborative Computing: Networking, Applications and Worksharing – New York, USA*
- 06: *Chairman of an International Expert Panel for a Joint Evaluation of the Computer Science Education at the Danish Universities - Copenhagen, Denmark*
- 06: *Chairman of an Evaluation Committee for an Associate Professorship at HIO*
- 06: *Program Committee Member at VLDB'06: 32nd Internat. Conference on Very Large Data Bases - Seoul, Korea*
- 06: *Organizing Committee Member, Program Committee Member, International Liaison and Session Chairman for CTS'06: 7th Internat. Symposium on Collaborative Technologies and Systems – Las Vegas, USA*
- 06: *Organizing, Reviewing papers for and Chairing a Special Session at CTS'06: 7th Internat. Symposium on Collaborative Technologies and Systems – Las Vegas, USA*
- 06: *Program Committee Member and Session Chairman at MOBCOPS'2006: 1st Internat. Workshop on Mobile Collaborative Applications and Systems – Atlanta, USA*
- 06: *Session Chairman at COLLABORATECOM'2006: 2nd Internat. Conference on Collaborative Computing: Networking, Applications and Worksharing – Atlanta, USA*
- 05: *Organization Committee Chairman / Local Organization Chair for VLDB'05: 31st Internat. Conference on Very Large Data Bases - Trondheim, Norway*
- 05: *Session Chairman at VLDB'05: 31st Internat. Conference on Very Large Data Bases - Trondheim, Norway*
- 05: *Organizing Committee Member, Program Committee Member, International Liaison and Session Chairman for CTS'05: 6th Internat. Symposium on Collaborative Technologies and Systems – Saint Louis, USA*
- 04: *Member of an Evaluation Committee for a PhD Defence at NTNU (Jon Olav Hauglid)*
- 04: *Member of an Evaluation Committee for a PhD Defence at UJF (Patricia Serrano Alvarado), Université Joseph Fourier - Grenoble, France*
- 04: *Program Committee Member and Session Chairman for CTS'04: 5th Internat. Symposium on Collaborative Technologies and Systems – San Diego, USA*
- 03: *Member of an Evaluation Committee for a PhD Defence at VUB (Werner Van Belle), Vrije Universiteit Brussel - Brussels, Belgium*
- 03: *Program Committee Member for CTS'03: 4th Internat. Symposium on Collaborative Technologies and Systems - Orlando, USA*
- 03: *Organizing and Reviewing papers for a Special Session at CTS'03: 4th Internat. Symposium on Collaborative Technologies and Systems - Orlando, USA*
- 02: *Paper Evaluator for IJCIS: Internat. Journal of Cooperative Information Systems - Tilburg, The Netherlands*
- 02: *Organizing, Reviewing papers for and Chairing a Special Session at CTS'02: 3rd Internat. Symposium on Collaborative Technologies and Systems - San Antonio, USA*
- 01: *Awarded 1-out-of-10 Best Papers at CIST'01: 6th INFORMS Conference on Information Systems and Technology - Miami, USA*

01: *Member of an Evaluation Committee for a Full Professorship at HIG*

01: *Member of an Evaluation Committee for an Associate Professorship at HIG*

01: *Chairman of an Evaluation Committee for a Full Professorship at NTNU*

01: *Member of an Evaluation Committee for a PhD Defence at NTNU (Alf Inge Wang)*

01: *Member of an Evaluation Committee for an MSc Defence at UCT (Ilan Azbel), Univ. of Cape Town - Cape Town, South Africa*

01: *Paper Evaluator for NIK'01: 14th Norwegian Informatics Conference - Tromsø, Norway*

00: *Chairman of an Evaluation Committee for an Associate Professorship at NTNU*

00: *Chairman of an Evaluation Committee for a Full Professorship at HIS*

00: *Chairman of an Evaluation Committee for an Associate Professorship at HIS*

00: *Paper Evaluator for NIK'00: 13th Norwegian Informatics Conference - Bodø, Norway*

99: *Chairman of an Evaluation Committee for a Full Professorship at HIS*

98: *Member of an Evaluation Committee for a Full Professorship at UIB*

98: *Appointed to the National Evaluation Committee for Full Professorships in NORWAY*

97: *Chairman of an Evaluation Committee for an Associate Professorship at NTNU*

97: *Paper Evaluator for IJCIS: Internat. Journal of Cooperative Information Systems - Trier, Germany*

97: *Paper Evaluator for SOFSEM'97: 24th Conference on Current Trends in Theory and Practice of Informatics - Milovy, Czech Republic*

97: *Paper Evaluator for NIK'97: 10th Norwegian Informatics Conference - Voss, Norway*

96: *Selected to Review Work for EU on TRENDS: Traffic Engineering Network Data Service - Brussels, Belgium*

95: *Member of an Evaluation Committee for an Adjunct Professorship at HSF*

94: *Awarded 1-out-of-10 Best Papers at ACIS'94: 5th Australasian Conference on Information Systems - Melbourne, Australia*

94: *Session Chairman at SCCC'94: 14th International Conference of the Chilean Computer Science Society - Concepcion, Chile*

94: *Chairman of an Evaluation Committee for an Associate Professorship at NLH*

92: *Initiated, Organized and Managed a Panel Debate on "Road Transport Informatics - Past, Present and Future" with 10 of the World's Top Experts at VNIS'92: 3rd International Conference on Vehicle Navigation & Information Systems - Oslo, Norway*

92: *Session Chairman at VNIS'92: 3rd International Conference on Vehicle Navigation & Information Systems - Oslo, Norway*

91: *Initiated, Organized and Managed two Workshops on "Road Transport Informatics - New Software and Hardware" with 10 of Norway's and 6 of Germany's Top Experts at Siemens Germany - Berlin & Munich, Germany*

89: *Appointed* National Expert to OECD on Information Technology in Transportation Engineering - and worked for 3 years with OECD Task Force MC5 on “Evaluative Research of Road-Vehicle Communication Systems” - *Paris, France*

SOME ASSIGNMENTS

- Developed (25%) and co-managed (2006-2010) the project “LONGREC – Records Management Over Decades”, a storage systems project in a basic research program financed by NFR
- Developed (50%) and participated in (2001-2005) the project “MOWAHS - Mobile Work Across Heterogeneous Systems”, a distributed systems project in a basic research program financed by NFR
- Developed (25%) and participated in (1997-2001) the project “OMODIS - Object-Oriented Modelling and Database Support for Distributed Multimedia Systems”, a distributed systems project in a basic research program financed by NFR
- Participated in (1997-2001) the project “CAGIS - Cooperating Agents in the Global Information Space”, a distributed systems project in a basic research program financed by NFR
- Reviewed (1996-1998) the project “TRENDS - Traffic Engineering Network Data Service”, an EU research project for the integration of database technology aspects into transportation informatics
- Participated in (1995-1997) the project “ACTRANS - A Transaction Processing Toolkit for ACTS”, an EU research project for the integration of transaction management aspects into telecom applications
- Managed (1995-1997) the project “NAMSEN RIVER - Monitoring and Control”, a multi-discipline research program concerning the integration and exploitation of information systems for river supervision, financed by NFR and several Norwegian industrial companies
- Managed and participated in (1994-1996) the project “OSLO NATIONAL AIRPORT - Traffic Information Systems”, a multi-client consultancy program for the national air transport authorities
- Participated in (1991-1993) the project “IDIS - Integrated Decentralized Information Systems”, a work on applying already available information technology earlier and better, financed by NTNF and several Norwegian industrial companies
- Worked in (1989-1993) OECD Task Force MC5 on “Evaluative Research of Road-Vehicle Communication Systems”, a research project on the use of information technology in transportation engineering
- Managed (1988) as Visiting Faculty the subproject “Advanced Databases” of an educational program at M.Sc.- level in Computer Science for 40 students in Bangkok, Thailand. Financed by UNDP. Lectured the course “Advanced Databases” at the Asian Institute of Technology
- Managed (1984) as Visiting Faculty the subproject “Operating Systems” of an educational program at M.Sc.- level in Computer Science for 40 students in Beijing, China. Financed by UNDP. Lectured the course “Operating Systems” at the Beijing Institute of Software
- Participated in (1982-1983) the project “DDB - Distributed Data Bases”, an EU research project trying to unify the views of computer network researchers and database system researchers on distributed systems

ABBREVIATIONS USED - MADN NYGÅRD, NTNU

UHR	Norwegian Association of Higher Education Institutions
NRT	Norwegian National Council for Technology
IDI/IDT/IDB	Department of Computer and Information Science
IME	Faculty of Information Technology, Mathematics and Electrical Engineering
FIM	Faculty of Physics, Informatics and Mathematics
NTNU/NTH	Norwegian University of Science and Technology
IED	Department of Electrical and Computer Engineering
UIS/HIS	University of Stavanger
IMF	Department of Mathematical Sciences
UMB/NLH	Norwegian University of Life Sciences
UNIK	University Graduate Center at Kjeller
UIB	University of Bergen
UITR	University of Tromsø
HIO	Oslo College
HIB	Bergen College
HIG	Gjøvik College
HSF	Finnmark College
CESAER	European organization for technology universities
N5T	Nordic alliance among technology universities
NORDTEK	Nordic association of technology universities and university colleges
SINTEF	Foundation for Scientific and Industrial Research at the Norwegian University of Science and Technology
KD	Norwegian Ministry of Education and Research
NFR/NTNF	Royal Norwegian Council for Research
NIF	Norwegian Society of Chartered Engineers
TEKNA	Norwegian Society of Chartered Technical and Scientific Professionals
EU	European Union
OECD	Organisation for Economic Cooperation and Development
UNDP	United Nations Development Program