

CURRICULUM VITAE

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

NAME *Mads Nygård*

YEAR OF BIRTH *1953*

NATIONALITY *Norwegian*

CIVIL STATUS *Divorced, No children*

POSITION *Dean, NTNU*
Engineering Education
Norwegian University of Science and Technology
Trondheim, Norway
Professor, NTNU (Full professor – Called to Position)
Department of Computer and Information Science
Faculty of Information Technology, Mathematics and Electrical Engineering
Norwegian University of Science and Technology
Trondheim, Norway

EDUCATION *1989/90 Dr. Techn. (D.Sc.)*
IDT / NTH; Trondheim, Norway
(University of Trondheim, Norwegian Institute of
Technology, Department of Computing Science)

1982 Dr. Ing. (Ph.D.) - Course Part only
IDB / NTH; Trondheim, Norway
(University of Trondheim, Norwegian Institute of
Technology, Department of Computing Science)

1978/79 Siv. Ing. (M.Sc.)
IDB / NTH; Trondheim, Norway
(University of Trondheim, Norwegian Institute of
Technology, Department of Computing Science)

1972 Ex. Phil.
UIO; Oslo, Norway
(University of Oslo)

**FULL TIME
EXPERIENCE**

| | |
|-------|--|
| 09- | NTNU Dean, Engineering Education |
| 97- | IDI / IME / NTNU Full Professor (Called to Position) |
| 96-97 | SINTEF Telecom & Informatics Principal Research Scientist, Comp. Science Department |
| 93-96 | SINTEF DELAB Principal Research Scientist, Database Technology Section |
| 91-93 | SINTEF DELAB Research Manager, Database Technology Section |
| 89-91 | ELAB-RUNIT/SINTEF Research Manager, Database Technology Section |
| 87-89 | RUNIT-F/SINTEF Research Scientist, Database Technology Section |
| 85-87 | RUNIT/SINTEF Section Head, Parallel Technology Section |
| 83-84 | RUNIT/SINTEF Research Scientist, Computer Networks Section |
| 81-83 | IDB / NTH University Fellow |
| 79-81 | IDB / NTH Assistant Professor |
| 79-79 | IDB / NTH Research Assistant |
| 79-79 | COMTEC/NOBØ Systems Programmer |

**PART TIME
EXPERIENCE**

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|-------|---|
| 97-06 | IED / UIS-HIS Adjunct Professor (Called to Position) |
| 94-97 | IMF / NLH-UMB Adjunct Professor |

SABBATICAL STAYS

- 07 UoO, University of Oxford - Oxford, England
Visiting Professor, Department of Computing
- 07 UoR, University of Rome - Rome, Italy
Visiting Professor, Department of Computing
- 06 UoN, University of Nice - Nice, France
Visiting Professor, Department of Computing
- 01 IC, Imperial College - London, England
Visiting Professor, Department of Computing
- 00 UCT, Univ. of Cape Town - Cape Town, South Africa
Visiting Professor, Department of Computer Science

SABBATICAL VISITS

- 07 UJF, Joseph Fourier University – Grenoble, France
Visiting Professor, Department of Computing
- 07 AAU, Aarhus University – Aarhus, Denmark
Visiting Professor, Department of Computing
- 06 GIT, Georgia Institute of Technology – Atlanta, USA
Visiting Professor, Department of Computing
- 03 UoM, University of Maryland – Maryland College Park, USA
Visiting Professor, Department of Computing
- 02 GU, Georgetown University – Washington D.C., USA
Visiting Professor, Department of Computer Science

FULL TIME UNDP WORK

- 88-88 AIT: Asian Institute of Technology - Bangkok, Thailand
Visiting Faculty, Department of Computer Science
- 84-84 BIS: Beijing Institute of Software - Beijing, China
Visiting Faculty, Department of Computer Science

PART TIME INT. WORK

- 96-98 EU: European Union - Brussels, Belgium
Evaluator, TRENDS Research Project
- 95-97 EU: European Union - Brussels, Belgium
Participator, ACTTRANS Research Project
- 89-93 OECD: Org. for Economic Cooperation and Development - Paris, France
Member, MC5 Task Force
- 82-83 EU: European Union - Brussels, Belgium
Participator, DDB Research Project

**SPECIAL
ACTIVITIES**

| | |
|----------------------------------|--|
| 09-02-06 | Chairman of the Executive Board for Engineering Education, NTNU Member of the Executive Board for Engineering Education, NTNU |
| 09-08-09 02-06 | Vice-Member of the Educational Council, NTNU Member of the Process Council, NTNU Member of the 2005 Exhibition Board, NTNU |
| 05-09 05-09 | Vice-Member of the Faculty Council, IME Vice-Member of the Employment Council, IME |
| 01-05 99-00 | Member of the Board of Directors, IDI Member of the Board of Directors, IDI |
| 08-09 01-06 99-00 98-99 | Vice-Member of the Curriculum Committee, IDI Chairman of the Curriculum Committee, IDI Chairman of the Curriculum Committee, IDI Member of the Curriculum Committee, IDI |
| 02-06 | Member of the Curriculum Committee, IME |
| 08-09 02-06 02-06 | Vice-Member of the Curriculum Committee, IME-Computer Science Chairman of the Curriculum Committee, IME-Computer Science Member of the Curriculum Committee, IME-Telecommunication |
| 01-02 98-99 97-98 | Chairman of the Curriculum Committee, FIM-Computer Science Chairman of the Curriculum Committee, IDI/ITEM Member of the Curriculum Committee, IDI/ITEM |
| 01-02 98-99 | Member of the Curriculum Committee, FIM-Mathematics/Physics Member of the Curriculum Committee, FIM-Mathematics/Physics |
| 01-02 98-99 | Member of the Curriculum Committee, FIM-Non Technical Member of the Curriculum Committee, FIM-Non Technical |
| 01-02 99-00 | Member of the Educational Committee, NTNU Member of the Educational Committee, NTNU |
| 81-83 79-81 79-80 | Member of the Faculty Council, FIM Member of the Curriculum Committee, IDB Member of the Research Committee, IDB/NTH |
| 09-07-09 05-07 | Chairman of the Board of Directors, UNIK Vice-Chairman of the Board of Directors, UNIK Member of the Board of Directors, UNIK |
| 89-93 | Member of the Board of Directors, SINTEF |
| 09-09 | Chairman of the Executive Board, NRT Member of the Board of Directors, NRT |
| 09-09 | Member of the Publication Council, UHR Vice-Member of the National Council for Natural Sciences, UHR |
| 09-10 | Member of the National Forum for Natural Sciences, KD Member of the National Think Thank on Recruitment to Natural Sciences, KD |

10- Member of the Executive Board, CESAER
09- Member of the Board of Directors, CESAER

09- Member of the Executive Board, NORDTEK

10- Chairman of the Educational Board, N5T

09- Vice-President in the Board of Directors, TEKNA-NORWAY
07-09 Member of the Board of Directors, TEKNA-NORWAY

05-08 Member of the Negotiation Board, TEKNA-NORWAY
05-08 Vice-Member of the Public Sector's Board, ACADEMICS-NORWAY

05-08 Vice-Chairman of the Public Sector's Board, TEKNA-NORWAY
02-05 Member of the Public Sector's Board, NIF-NORWAY / TEKNA-NORWAY

97-99 Member of the Board of Directors, NIF-NORWAY

97-99 Chairman of the Technical Board, NIF-NORWAY
95-97 Vice-Chairman of the Technical Board, NIF-NORWAY
93-95 Member of the Technical Board, NIF-NORWAY

97-99 Member of the Election Committee, NIF-TRONDHEIM
95-97 Member of the Technical Committee, NIF-TRONDHEIM

94-97 Chairman of the Regional Sector's Board, NIF-TRONDHEIM
93-94 Vice-Chairman of the Regional Sector's Board, NIF-TRONDHEIM
92-93 Member of the Regional Sector's Board, NIF-TRONDHEIM

91-93 Member of the Private Sector's Board, NIF-NORWAY
90-91 Vice-Member of the Private Sector's Board, NIF-NORWAY

88-90 Chairman of the Corporate Board, NIF-SINTEF
87-88 Member of the Corporate Board, NIF-SINTEF

87-88 Chairman of the Negotiation Committee, NIF-SINTEF
86-87 Member of the Negotiation Committee, NIF-SINTEF

89-90 Elected Representative, NIF-ELAB-RUNIT
87-89 Elected Representative, NIF-RUNIT-F
85-87 Elected Representative, NIF-RUNIT

10- Member of the Political Conference, TEKNA-NORWAY
96-08 Member of the Political Congress, NIF-NORWAY / TEKNA-NORWAY
91- Member of the Representative Council, NIF-NORWAY / TEKNA-NORWAY

10- Member of the Board of Directors, ISAS
09- Vice-Member of the Board of Directors, IN

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: *Called to position as Full Professor at NTNU*
- 97: *Called to position as Adjunct Professor at HIS*
- 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: *Found qualified and Offered position as Full Professor at HIS*
- 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: *Offered to hold a Technical Tutorial on "Transaction Management" at SCCC'96: 16th International Conference of the Chilean Computer Science Society - Valdivia, Chile*
- 94: *Chairman of an Evaluation Committee for an Associate Professorship at NLH*
- 93: *Found qualified for a Full Professorship - when employed as Adjunct Professor at NLH*
- 93: *Found qualified for a Full Professorship - when promoted to Principal Research Scientist*
- 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 [Fully documented in SINTEF Report STF40 A93107]*
- 92: *Session Chairman at VNIS'92: 3rd International Conference on Vehicle Navigation & Information Systems - Oslo, Norway*
- 92: *Invited Panellist on "Open Solutions - Fiction or Fact" at Norwegian Computer Society's Technology Days - Bergen, Norway*
- 92: *Session Chairman at Norwegian Computer Society's InfoTech 92 - Oslo, Norway*
- 92: *Found qualified for a Special Scholarship Associated with a Full Professorship at UIT*
- 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 [Fully documented in SINTEF Report STF40 A92060]*
- 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 [Fully documented in OECD Reports DSTI/RTR/RVC(92)1 & DSTI/RTR/RVC(92)2]*
- 88: *Offered position as a Director of a Department at SINTEF*
- 85: *Appointed Censor at NTH, Department of Computer Science and Telematics*

**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.

**MAIN FIELDS
OF COMPETENCE**

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

**EVALUATION
OF DEPARTMENT**

IDI/NTNU found to be of Excellent Quality
in an International Evaluation 2002

**NO OF
PUBLICATIONS**

| | | |
|----------------|-----------------|----------------|
| International: | 77 (1992-2011) | 80 (...-2011) |
| National: | 30 (1992-2011) | 54 (...-2011) |
| Local: | 47 (1992-2011) | 58 (...-2011) |
| Informal: | 15 (1992-2011) | 15 (...-2011) |
| Total: | 169 (1992-2011) | 207 (...-2011) |

**COUNTRIES
WORKED IN**

Norway, England, France, Italy, Belgium, Denmark,
USA, China, Thailand, South Africa

ACCESS POINTS

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Telefax: +47 73 59 44 66
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 Chart. Engineers /
Norw. Society of Chart. Technical and Scientific Professionals
With Honorary Prize Awarded Summer 2002

LANGUAGES

English (fluent), German, French (limited)

LAST UPDATED

31.03.2011

IMPORTANT PUBLICATIONS:

INTERNATIONAL PUBLICATIONS

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. *ICCC’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, Concepcion - 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, Concepcion - 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

1988

(78) Mads Nygård:
“Non-Serializability with Wander-Transactions in Skeleton-Databases”;
SINTEF Report STF14 A88056

Dr. Techn. Thesis with the following Appointed Opponents:

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(79) Mads Nygård:
“Advanced Database Systems”;
Lecture Notes - AIT, Bangkok - Thailand

1984

(80) Mads Nygård:
“Operating Systems”;
Lecture Notes - BIS, Beijing - China

NATIONAL PUBLICATIONS

2011

- (1) Mads Nygård:
“**Future Framework for the Norwegian Bachelor of Engineering Education !**”;
Invited Talk – *KD, Oslo - Norway*
- (2) Mads Nygård, Per Egeness:
“**7th National Seminar for Norwegian Technical University & College Employees**”;
TEKNA Report TEKNA-MN-11-01 (in Norwegian)

2010

- (3) Mads Nygård:
“**Required Changes in the Norwegian Bachelor of Engineering Education !**”;
Invited Talk – *KD, Oslo - Norway*

2009

- (4) Mads Nygård, Per Egeness:
“**6th National Seminar for Norwegian Technical University & College Employees**”;
TEKNA Report TEKNA-MN-09-01 (in Norwegian)

2008

- (5) Mads Nygård, Per Egeness:
“**5th National Seminar for Norwegian Technical University & College Employees**”;
TEKNA Report TEKNA-MN-08-01 (in Norwegian)
- (6) Mads Nygård:
“**How Well is the Norwegian Bachelor of Engineering Education ?**”;
Invited Talk – *NITO & FF, Sandvika - Norway*

2007

- (7) Mads Nygård, Per Egeness:
“**4th National Seminar for Norwegian Technical University & College Employees**”;
TEKNA Report TEKNA-MN-07-01 (in Norwegian)

2006

- (8) Mads Nygård, Per Egeness:
“**3rd National Seminar for Norwegian Technical University Employees**”;
TEKNA Report TEKNA-MN-06-01 (in Norwegian)

2005

- (9) Mads Nygård, Per Egeness:
“**2nd National Seminar for Norwegian Technical University Employees**”;
TEKNA Report TEKNA-MN-05-01 (in Norwegian)

2003

- (10) Mads Nygård, Per Egeness:
“**1st National Seminar for Norwegian Technical University Employees**”;
TEKNA Report TEKNA-MN-03-01 (in Norwegian)

2002

- (11) Ole Bernt Thorvaldsen, Mads Nygård et. all. (12 authors in total):
“**Information Technology as Kernel Subject**”;
NNR Report NNR-MN-02-01 (in Norwegian)

2001

- (12) Mads Nygård:
“**The MSc Study in Informatics at NTNU**”;
Invited Talk - *Department of Informatics, University of Oslo, Bolkesjø - Norway*

2000

- (13) Mads Nygård et. all. (8 authors):
“**Enhancing the Recruitment to NTNU**”;
NTNU Report NTNU-MN-00-01 (in Norwegian)

1998

- (14) Mads Nygård et. all. (6 authors):
“**Strengthening the Future of NTNU**”;
NTNU Report NTNU-MN-98-01 (in Norwegian)

- (15) Mads Nygård et. all. (10 authors):
“**Evaluating the Potential of MSCs as Teachers**”;
NTNU Report NTNU-MN-98-02 (in Norwegian)

1996

- (16) Mads Nygård:
“**Traffic Information Systems - Bid Evaluations for Oslo National Airport**”;
SINTEF Report STF40 F96085 (in Norwegian)

- (17) Mads Nygård:
“**NAMSINFO - Report from the Preproject**”;
SINTEF Report STF40 F96086 (in Norwegian)

1995

- (18) Mads Nygård:
“**Traffic Information Systems - Information Technology Integration for Oslo National Airport**”;
Invited Talk - *In Proc. Norwegian Society of Chartered Engineers' ETA-Days in Trondheim [Also available as SINTEF Report STF40 A95096 (in Norwegian)]*

- (19) Mads Nygård:
“**Traffic Information Systems - Detailed Solutions for Oslo National Airport**”;
SINTEF Report STF40 F95092 (in Norwegian)

- (20) Mads Nygård:
“**Traffic Information Systems - Requirements Specification for Oslo National Airport**”;
SINTEF Report STF40 F95095 (in Norwegian)

1994

- (21) Mads Nygård:
“**Traffic Information Systems - Concepts, Options and Recommendations for Oslo National Airport**”;
SINTEF Report STF40 F94145 (in Norwegian)

- (22) Mads Nygård:
“**Information Technology in Road Transport - Summary of Program**”;
SINTEF Report STF40 A94146 (in Norwegian)

1993

- (23) Mads Nygård:
“**IDIS: Integrated Distributed Information Systems**”;
Invited Talk - *Norwegian Computer Society's Annual Meeting in Trondheim [Also available as SINTEF Report STF40 A93163 (in Norwegian)]*

- (24) Mads Nygård:
“**Information Technology in Road Transport - Visions and Realities**”;
SINTEF Report STF40 A93107 (in Norwegian)

- (25) Stein Johannessen, Mads Nygård:
“Registration and Control of Road Transport - Technology, Trends, Products and Potential”;
SINTEF Report STF63 A93001 (in Norwegian)
- (26) Mads Nygård et. all. (seven organizations in total):
“GRACE - Grouping for Research into Advanced CCCI for Europe”;
LOGICA CAMBRIDGE Limited - EUCLID-VI Proposal, Cambridge - England [Partially available as SINTEF Memo SD-MN-93-01]
- 1992
- (27) Mads Nygård:
“Distributed Databases - In View of Open Solutions”;
 Invited Talk - In Proc. *Norwegian Computer Society’s Technology Days in Bergen* [Also available as SINTEF Report STF40 A92196 (in Norwegian)]
- (28) Mads Nygård, Tor Didriksen:
“DDBMS - Competence and Experience at Sintef Delab”;
 Special Talk - *Norwegian Institute of Technology’s Nordic Seminar on Dependable Computing Systems in Trondheim* [Directly available as SINTEF Memo SD-MN-92-01]
- (29) Mads Nygård:
“Information Technology in Road Transport - Components and Systems”;
SINTEF Report STF40 A92060 (in Norwegian)
- (30) Mads Nygård:
“Relaxed Correctness Criteria for Concurrency Control and Recovery in Distributed Databases”;
SINTEF Report STF40 A92197
- 1991
- (31) Mads Nygård et. all. (five authors in total):
“REPTTEL - Integration of Replic and Telstøtt, Parts I & II”;
SINTEF Report STF40 A91049
- (32) Mads Nygård, Birger Elvestad:
“Strategic Product Development - Information Technology in Transportation Engineering, Parts I & II”;
SINTEF Report STF40 A91068 (in Norwegian)
- (33) Mads Nygård:
“Partial Recoverability in Distributed Databases”;
SINTEF Report STF40 A91164
- (34) Stein Johannessen, Mads Nygård:
“Information Technology in Road Transport - Registration and Control”;
SINTEF Report STF63 F91016 (in Norwegian)
- (35) Mads Nygård et. all. (six organizations in total):
“EIDER - Enhanced Interoperability for Data Repositories and Environments”;
CAP GEMINI Innovation - ESPRIT-III Bid, Paris - France [Partially available as SINTEF Memo SD-MN-91-01]
- 1990
- (36) Mads Nygård et. all. (four authors in total):
“ATCCIS - With Varying Degrees of Availability”;
SINTEF Report STF40 F90066
- (37) Mads Nygård:
“Varying Degrees of Serializability in Replicated Databases”;
SINTEF Report STF40 A90137
- (38) Mads Nygård:
“Multidatabases vs. Heterogeneous Distributed Databases”;
SINTEF Report STF40 A90193

(39) Mads Nygård:
“Recovery Criteria and Mechanisms for Wander-Transactions in Skeleton-Databases”;
SINTEF Report STF40 A90194

1989

(40) Mads Nygård:
“Non-Serializability in Distributed Databases”;
SINTEF Report STF40 A89229

1986

(41) Mads Nygård, Jon Strømme:
“A Discussion of some Theoretical Foundations of Asynchronous Parallel Processes”;
SINTEF Report STF14 A86063

(42) Olav Kvittem, Mads Nygård et. all. (three authors in total):
“Transaction Mechanisms in Parallel Database Machines”;
SINTEF Report STF14 A86064

1982

(43) Mads Nygård:
“Advanced Database Systems”;
Lecture Notes - NTH

(44) Mads Nygård:
“Advanced Distributed Data Processing”;
Lecture Notes - NTH

(45) Mads Nygård:
“Advanced Operating Systems”;
Lecture Notes - NTH

1981

(46) Alf Engdal, Mads Nygård et. all. (six authors in total):
“Distributed Data Processing”;
SINTEF Report STF14 A81016 (in Norwegian)

(47) Mads Nygård, Dag H. Wanvik:
“How to use Jensen’s Device”;
Reference Manual - Hadeland Products (in Norwegian)

1980

(48) Mads Nygård, Oddvar Risnes:
“Computers and Programming”;
Lecture Notes - NTH

(49) Mads Nygård:
“Computers and Programming”;
Lecture Notes - NTH (in Norwegian)

(50) Mads Nygård:
“Programming in Cobol”;
Lecture Notes - NTH (in Norwegian)

(51) Mads Nygård:
“Assembly Programming”;
Lecture Notes - NTH (in Norwegian)

1979

- (52) Mads Nygård, Georg Ræder:
“Implementation and Discussion of Concurrent Pascal”;
IDB Technical Report 1/79

Siv. Ing. Thesis with the following Appointed Censors:

Prof. Terje Noodt, UIO
Prof. Arne Halaas, IDB/NTH

- (53) Mads Nygård, Arne Halaas:
“Operating Systems in general - Sintran III in special”;
Text Book - Tapir Publ. Comp. 82-519-0340-8 (in Norwegian)

1978

- (54) Per A. Andersen, Mads Nygård:
“A Study of Different Languages and Related Tools for Description and Simulation of Digital Systems”;
IDB Technical Report 6/78

LOCAL PUBLICATIONS

2009

- (1) Mads Nygård:
“**Distributed Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-09-01 (in Norwegian)

2008

- (2) Mads Nygård:
“**Operating Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-08-01 (in Norwegian)
- (3) Mads Nygård:
“**Distributed Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-08-02 (in Norwegian)

2007

- (4) Mads Nygård:
“**Operating Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-07-01 (in Norwegian)

2006

- (5) Mads Nygård:
“**Distributed Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-06-01 (in Norwegian)
- (6) Endre Angelvik, Mads Nygård et. all. (six authors in total):
“**LONGREC - Bid Proposal for NFR**”;
NTNU Memo IDI-MN-06-02

2005

- (7) Mads Nygård:
“**Operating Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-05-01 (in Norwegian)
- (8) Mads Nygård:
“**Distributed Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-05-02 (in Norwegian)
- (9) Mads Nygård:
“**Distributed Systems - Course Notes at UIS**”;
UIS Memo IED-MN-05-03 (in Norwegian)

2004

- (10) Mads Nygård:
“**Operating Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-04-01 (in Norwegian)
- (11) Mads Nygård:
“**Distributed Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-04-02 (in Norwegian)
- (12) Mads Nygård:
“**Distributed Systems - Course Notes at HIS**”;
HIS Memo IED-MN-04-03 (in Norwegian)

2003

- (13) Mads Nygård:
“**Operating Systems & Computer Architecture - Course Notes for NTNU**”;
NTNU Memo IDI-MN-03-01 (in Norwegian)

- (14) Mads Nygård:
“Distributed Systems - Course Notes for NTNU”;
NTNU Memo IDI-MN-03-02 (in Norwegian)
- (15) Mads Nygård:
“Distributed Systems - Course Notes at HIS”;
HIS Memo IED-MN-03-03 (in Norwegian)
- 2002
- (16) Mads Nygård:
“Operating Systems & Computer Architecture - Course Notes for NTNU”;
NTNU Memo IDI-MN-02-01 (in Norwegian)
- (17) Mads Nygård:
“Distributed Systems & Performance Evaluation - Course Notes for NTNU”;
NTNU Memo IDI-MN-02-02 (in Norwegian)
- (18) Mads Nygård:
“Distributed Systems - Course Notes at HIS”;
HIS Memo IED-MN-02-03 (in Norwegian)
- 2001
- (19) Mads Nygård:
“Operating Systems & Computer Architecture - Course Notes for NTNU”;
NTNU Memo IDI-MN-01-01 (in Norwegian)
- (20) Mads Nygård:
“Distributed Systems - Course Notes at HIS”;
HIS Memo IED-MN-01-02 (in Norwegian)
- 2000
- (21) Mads Nygård:
“Distributed Systems & Performance Evaluation - Course Notes for NTNU”;
NTNU Memo IDI-MN-00-01 (in Norwegian)
- (22) Mads Nygård:
“Distributed Systems - Course Notes at HIS”;
HIS Memo IED-MN-00-02 (in Norwegian)
- (23) Mads Nygård:
“Distributed Systems - Lecture Notes at HIS”;
HIS Memo IED-MN-00-03 (in Norwegian)
- (24) Reidar Conradi, Mads Nygård:
“MOWAHS - Bid Proposal for NFR”;
NTNU Memo IDI-MN-00-04 - NFR
- 1999
- (25) Mads Nygård:
“Operating Systems & Computer Architecture - Course Notes for NTNU”;
NTNU Memo IDI-MN-99-01 (in Norwegian)
- (26) Mads Nygård:
“Distributed Systems - Course Notes for NTNU”;
NTNU Memo IDI-MN-99-02 (in Norwegian)
- (27) Mads Nygård:
“Distributed Systems - Lecture Notes for NTNU”;
NTNU Memo IDI-MN-99-03 (in Norwegian)
- (28) Mads Nygård:
“Distributed Databases - Course Notes at HIS”;
HIS Memo IED-MN-98-04 (in Norwegian)

1998

(29) Mads Nygård:
“**Operating Systems - Course Notes for NTNU**”;
NTNU Memo IDI-MN-98-01 (in Norwegian)

(30) Mads Nygård:
“**Operating Systems - Lecture Notes for NTNU**”;
NTNU Memo IDI-MN-98-02 (in Norwegian)

(31) Mads Nygård:
“**Distributed Databases - Course Notes at HIS**”;
HIS Memo IED-MN-98-03 (in Norwegian)

(32) Mads Nygård:
“**Distributed Databases - Lecture Notes at HIS**”;
HIS Memo IED-MN-98-04 (in Norwegian)

1997

(33) Letizia Jaccheri, Mads Nygård:
“**Introduction to Computer Science - Lecture Notes for NTNU**”;
NTNU Memo IDI-MN-97-01 (in Norwegian)

(34) Mads Nygård:
“**Geographical Database Systems - Lecture Notes at NLH**”;
NLH Memo IMF-MN-97-02 (in Norwegian)

1996

(35) Mads Nygård:
“**Traffic Information Systems - Specification Evaluations for Oslo National Airport**”;
SINTEF Memo SD-MN-96-01 - OHAS (in Norwegian)

(36) Mads Nygård:
“**Introduction to Programming - Lecture Notes for NTNU**”;
SINTEF Memo SD-MN-96-02 - NTNU (in Norwegian)

(37) Vera Goebel, Mads Nygård et. all. (four authors in total):
“**OMODIS - Bid Proposal for NFR**”;
SINTEF Memo SD-MN-96-03 - NFR

1995

(38) Mads Nygård, Arne-Jørgen Berre:
“**Distributed Databases - Contributions from Sintef**”;
Invited Talk - *Royal Norwegian Council for Research's Initiation Meeting in Oslo* [Also available as
SINTEF Memo SD-MN-95-01 (in Norwegian)]

1994

(39) Mads Nygård:
“**AMERICAN AIRPORTS - Report from Visitation**”;
SINTEF Memo SD-MN-94-01 - OHAS (in Norwegian)

(40) Mads Nygård:
“**SHARED AIRPORT DATABASE - Coordination with Letis**”;
SINTEF Memo SD-MN-94-02 - OHAS (in Norwegian)

(41) Mads Nygård:
“**Distributed Databases - Lecture Notes at HIS**”;
SINTEF Memo SD-MN-94-03 - HIS (in Norwegian)

(42) Mads Nygård:
“**Distributed Databases - Lecture Notes at NLH**”;
NLH Memo IMF-MN-94-05 (in Norwegian)

1993

- (43) Mads Nygård:
“**Distributed Databases - Theory and Practice**”;
Invited Talk - *Sintef Delab Board Meeting in Trondheim* [Also available as SINTEF Memo SD-MN-93-02 (in Norwegian)]
- (44) Mads Nygård et. all. (three organizations in total):
“**OSLO NATIONAL AIRPORT - Traffic Information Systems**”;
IGP AS - OHAS Proposal & Bid [Partially available as SINTEF Memo SD-MN-93-03 (in Norwegian)]
- (45) Mads Nygård, Mette Vestli:
“**IDIS - Specification and Prioritization of Basic Activities**”;
SINTEF Memo SD-MN-93-04 - NTN (in Norwegian)

1992

- (46) Aage J. Thunem, Mads Nygård et. all.:
“**Technology Plan - Information Technology in Transportation Engineering**”;
Project Memo - NÆR. & IND. DEPARTEM. (in Norwegian)
- (47) Mads Nygård, Ole J. Mengshoel:
“**Combined Focus - Database Systems & Knowledge Engineering**”;
SINTEF Memo SD-MN-92-02 - DELAB (in Norwegian)

1991

- (48) Odd H. Longva, Mads Nygård et. all.:
“**Focused Areas - Information Technology in Transportation Engineering**”;
Project Memo - DELAB & SINTEF (in Norwegian)
- (49) Mads Nygård, Oddvar Risnes:
“**Strategic Plan - Database Technology Section**”;
SINTEF Memo SD-MN-91-02 - DELAB (in Norwegian)

1990

- (50) Mads Nygård:
“**Theory of Deductive Databases**”;
Seminar Notes - ELAB-RUNIT/NTH

1989

- (51) Birger Elvestad, Mads Nygård et. all. (three authors in total):
“**Information Technology in Transportation Engineering - Research Areas**”;
Project Memo - NTN (in Norwegian)
- (52) Tore Sæter, Mads Nygård:
“**PACS - Selection of Software Products for the Pilot Project**”;
Project Memo - NTN (in Norwegian)

1987

- (53) Mads Nygård:
“**Theory for Normalization of Databases**”;
Seminar Notes - RUNIT-F/NTH

1981

- (54) Mads Nygård:
“**Distributed Data Processing**”;
Seminar Notes - RUNIT/TF (in Norwegian)
- (55) Alf Engdal, Mads Nygård et. all. (three authors in total):
“**Computer Networks and Network Operating Systems**”;
Seminar Notes - RUNIT/TF (in Norwegian)

1980

- (56) Mads Nygård:
“Operating Systems”;
Seminar Notes - EB (in Norwegian)

1979

- (57) Mads Nygård:
“Concurrent Pascal”;
Seminar Notes - RUNIT/KIS/EB (in Norwegian)

- (58) Mads Nygård:
“Programming Languages”;
Seminar Notes - COMTEC (in Norwegian)

INFORMAL PUBLICATIONS

2011

- (1) Aftenposten (Norwegian Newspaper): Interview concerning NTNU engineering education & Tekna work
(Research Conditions)
- (2) Adresseavisen (Norwegian Newspaper): Interview concerning NTNU engineering education & Tekna work
(PhD Students)

2010

- (3) Teknisk Ukeblad (Norwegian Science Periodical): Interview concerning the NTNU engineering education
(Management Issues)
- (4) Teknisk Ukeblad (Norwegian Science Periodical): Interview concerning the Tekna work
(Health Registers)
- (5) Universitetsavisa (Norwegian University Periodical): Interview concerning the NTNU engineering education
(Curriculum Issues)

2009

- (6) Teknisk Ukeblad (Norwegian Science Periodical): Interview concerning the Tekna work
(VicePresidency Election)
- (7) Tekna (Norwegian Trade Union Periodical): Interview concerning the Tekna work
(Oil Exploration)

2008

- (8) NRK (Norwegian Broadcasting Cooperation): Interview concerning the Tekna work
(Research Conditions)
- (9) Vårt Land (Norwegian Newspaper): Interview concerning the NTNU work
(LongRec project)
- (10) Gemini (Norwegian Science Periodical): Interview concerning the NTNU work
(LongRec project)
- (11) Under Dusken (Norwegian Student Periodical): Interview concerning the NTNU work
(LongRec project)

2007

- (12) Aftenposten (Norwegian Newspaper): Interview concerning the Tekna work
(Research Conditions)
- (13) Tekna (Norwegian Trade Union Periodical): Interview concerning the Tekna work
(Research Conditions)

1997

- (14) Teknisk Ukeblad (Norwegian Science Periodical): Interview concerning the Tekna work
(Research Management)

1996

- (15) Sivilingeniøren (Norwegian Trade Union Periodical): Interview concerning the Tekna work
(Research Management)

DETAILED EXPERIENCE:

2011

- Worked as *Chairman of the Executive Board for Engineering Education* at NTNU with coordination and quality assurance across four separate faculties and seventeen study programs
- Worked as *Chairman of the Executive Board in the National Council for Technology* in Norway with coordination and quality assurance across seven universities and eighteen university colleges

2010

- Worked as *Chairman of the Executive Board for Engineering Education* at NTNU with coordination and quality assurance across four separate faculties and seventeen study programs
- Worked as *Chairman of the Executive Board in the National Council for Technology* in Norway with coordination and quality assurance across seven universities and eighteen university colleges
- My *8th Dr.Ing.-student* at NTNU successfully submitted his *Dr.Ing.-thesis* (Marius Grannæs, Co-Sup.)
- My *11th Dr.Ing.-student* at NTNU successfully submitted his *Dr.Ing.-thesis* (Magnus Jahre, Co-Sup.)
- Supervised *1 Diploma-student* at NTNU (Thomas Haugland Rudfoss)

2009

- Lectured the course *Distributed Systems* at NTNU
- Co-Managed the project “*LONGREC – Records Management Over Decades*”, a storage systems project in a basic research program financed by NFR
- *Found qualified* and evaluated as *Second best candidate* for position as *Pro-Rector for Education* at NTNU
- *Found qualified* and evaluated as *Second best candidate* for position as *Pro-Rector for Innovation* at NTNU
- Employed as *Dean of Engineering Education* at NTNU
- Worked as *Chairman of the Executive Board for Engineering Education* at NTNU with coordination and quality assurance across four separate faculties and seventeen study programs
- Worked as *Chairman of the Executive Board in the National Council for Technology* in Norway with coordination and quality assurance across seven universities and eighteen university colleges
- Supervised *1 Project-student* at NTNU (Thomas Haugland Rudfoss)

2008

- Lectured the course *Distributed Databases* at NTNU (Ph.D.-level)
- Lectured the course *Operating Systems* at NTNU
- Lectured the course *Distributed Systems* at NTNU
- Organized the course module *Transaction Processing* at NTNU
- Supervised *1 Project-student* at NTNU (Ole Henrik Næss)
- Co-Managed the project “*LONGREC – Records Management Over Decades*”, a storage systems project in a basic research program financed by NFR

2007

- On *Sabbatical Leave* at Department of Computer Science, University of Oxford, *Oxford – England*, & Department of Computer Science, University of Rome, *Rome – Italy* (Spring Semester)
- Conducted several sabbatical visits to several foreign universities (UJF & AAU)
- Lectured the course *Operating Systems* at NTNU
- Organized the course module *Transaction Processing* at NTNU

- My 6th *Dr.Ing.-student* at NTNU successfully submitted his *Dr.Ing.-thesis* (Haakon Dybdahl, Co-Sup.)
- Started supervision of a 9th *Dr.Ing.-student* at NTNU (Feng Luan)
- Started supervision of a 10th *Dr.Ing.-student* at NTNU (Jianqiang Ma, Co-Supervisor)
- Started supervision of a 11th *Dr.Ing.-student* at NTNU (Magnus Jahre, Co-Supervisor)
- My 7th *Dr.Ing.-student* at NTNU unsuccessfully left his *Dr.Ing.-study* (Terje Wahl, Co-Supervisor)
- Co-Managed the project “LONGREC – *Records Management Over Decades*”, a storage systems project in a basic research program financed by NFR

2006

- Lectured the course *Distributed Systems* at NTNU
- My 3rd *Dr.Ing.-student* at NTNU successfully submitted his *Dr.Ing.-thesis* (Hien Nam Le)
- Started supervision of a 8th *Dr.Ing.-student* at NTNU (Marius Grannæs, Co-Supervisor)
- Supervised 1 *Diploma-student* at NTNU (Steinar Skjerven)
- Developed the project “LONGREC – *Records Management Over Decades*” (25%), a storage systems project in a basic research program financed by NFR
- On *Sabbatical Leave* at Department of Computer Science, University of Nice, *Nice - France* (Autumn Semester)
- Conducted a sabbatical visit to a foreign university (GIT)

2005

- Lectured the course *Operating Systems* at NTNU
- Lectured the course *Distributed Systems* at NTNU
- Lectured the course *Distributed Systems* at UIS
- Organized the course module *Transaction Processing* at NTNU
- Organized the course module *Geographical Information Systems* at NTNU
- Supervised 3 *Diploma-students* at NTNU (Gunnar Gauslaa Bergem & Rune Høivik; Tobias Melcher)
- Supervised 1 *Project-student* at NTNU (Steinar Skjerven)
- My 4th *Dr.Ing.-student* at NTNU unsuccessfully left his *Dr.Ing.-study* (Susmit Bagchi)
- Chaired the *NTNU Students' Excursion* to Kuala Lumpur, Malaysia
- Participated in the project “MOWAHS - *Mobile Work Across Heterogeneous Systems*”, a distributed systems project in a basic research program financed by NFR

2004

- Lectured the course *Distributed Databases* at NTNU (Ph.D.-level)
- Lectured the course *Operating Systems* at NTNU
- Lectured the course *Distributed Systems* at NTNU
- Lectured the course *Distributed Systems* at HIS
- Organized the course module *Transaction Processing* at NTNU
- Organized the course module *Geographical Information Systems* at NTNU
- Started supervision of a 6th *Dr.Ing.-student* at NTNU (Haakon Dybdahl, Co-Supervisor)
- Started supervision of a 7th *Dr.Ing.-student* at NTNU (Terje Wahl, Co-Supervisor)
- Supervised 1 *Diploma-student* at NTNU (Fredrik Dahl-Jørgensen)

- Supervised 2 *Project-students* at NTNU (Rune Høivik & Samson Wurgessa)
- Worked on establishing exchange programs for faculty and students between NTNU and several foreign universities (UJF & VUB)
- Participated in the project “*MOWAHS - Mobile Work Across Heterogeneous Systems*”, a distributed systems project in a basic research program financed by NFR

2003

- Lectured the course *Operating Systems & Computer Architecture* (50%) at NTNU
- Lectured the course *Distributed Systems* at NTNU
- Lectured the course *Distributed Systems* at HIS
- Organized the course module *Transaction Processing* at NTNU
- Organized the course module *Geographical Information Systems* at NTNU
- Started supervision of a *5th Dr.Eng.-student* at NTNU (Gisle Hop Grimen, Co-Supervisor)
- Supervised 1 *Diploma-student* at NTNU (Ngoc Dan Dien Huynh)
- Supervised 2 *Project-students* at NTNU (Marius Jensen; Pål Christian Thorsen)
- Conducted several sabbatical visits to several foreign universities (UoM & GU)
- Worked on establishing exchange programs for faculty and students between NTNU and several foreign universities (UoM & GU)
- Participated in the project “*MOWAHS - Mobile Work Across Heterogeneous Systems*”, a distributed systems project in a basic research program financed by NFR

2002

- Lectured the course *Operating Systems & Computer Architecture* (50%) at NTNU
- Lectured the course *Distributed Systems & Performance Evaluation* (50%) at NTNU
- Lectured the course *Distributed Systems* at HIS
- Organized the course module *Transaction Processing* at NTNU
- Organized the course module *Geographical Information Systems* at NTNU
- My *1st Dr.Eng.-student* at NTNU successfully defended his *Dr.Eng.-thesis* (Heri Ramampiaro)
- My *2nd Dr.Eng.-student* at NTNU successfully defended his *Dr.Eng.-thesis* (Erlend Tøssebro)
- Started supervision of a *4th Dr.Eng.-student* at NTNU (Susmit Bagchi)
- Supervised 5 *Diploma-students* at NTNU (Tor Martin Kristiansen; Wenye Yu; Lars Åserud; Vebjørn Ljosa; Pål Are Sætre)
- Supervised 6 *Project-students* at NTNU (Fredrik Dahl-Jørgensen & Nils Olav Rislå; Frode Fjellstad; Synnøve Hellevik; Tor Erik Granaas Vassvik; Ngoc Dan Dien Huynh)
- Conducted several sabbatical visits to several foreign universities (UoM & GU)
- Designed a new *Curriculum Program* for the *Non Professional Computer Science* students at NTNU
- Finished work on a DND committee for *Continuing Education Evaluation and Coordination* in Norway
- Worked on an NNR committee on *Information Technology and Higher Education* in Norway
- Worked on an NTNU committee on *Bioinformatics* for both the *Professional students* and the *Non Professional students* at NTNU
- Participated in an ERCIM consortium establishing a *GRID project*
- Participated in an IME group establishing a *WEBTEK program*

- Participated in the project “*MOWAHS - Mobile Work Across Heterogeneous Systems*”, a distributed systems project in a basic research program financed by NFR

2001

- On *Sabbatical Leave* at Department of Computing, Imperial College, *London - England* (Spring Semester)
- Lectured the course *Operating Systems & Computer Architecture* (50%) at NTNU
- Lectured the course *Distributed Systems* at HIS
- Organized the course module *Transaction Processing* at NTNU
- Organized the course module *Geographical Information Systems* at NTNU
- Started supervision of a *3rd Dr.Ing.-student* at NTNU (Hien Nam Le)
- Supervised *1 Diploma-student* at NTNU (Jan Fredrik Wedén)
- Supervised *5 Project-students* at NTNU (Tor Martin Kristiansen & Pål Are Sætre; Martin Ranang & Lars Åserud; Wenyue Yu)
- Evaluated the current *Curriculum Program* for the *Professional Computer Science* students at NTNU
- Worked on a national committee for *Evaluation and Coordination of Information Technology Studies* within *All Universities* in Norway
- Started work on a DND committee for *Continuing Education Evaluation and Coordination* in Norway
- Participated in the project “*MOWAHS - Mobile Work Across Heterogeneous Systems*”, a distributed systems project in a basic research program financed by NFR

2000

- Lectured the course *Distributed Systems & Performance Evaluation* (50%) at NTNU
- Lectured the course *Distributed Systems* at HIS
- Supervised *1 Diploma-student* at NTNU (Thorvald Bøe)
- Supervised *7 Project-students* at NTNU (Lars Killingdalen & Mufrid Krilic; Tor Håvard Bieltvedt; Stein Gran; Pål Kristen Hansen; Hallvard Korsgaard; Martin Valland)
- Finished work on an NTNU committee *Tightening the Industrial Cooperation* with Alcatel
- Worked on an NTNU committee for *Enhancing the Recruitment* to NTNU
- Participated in the project “*CAGIS - Cooperating Agents in the Global Information Space*”, a distributed systems project in a basic research program financed by NFR
- Participated in 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
- Developed the project “*MOWAHS - Mobile Work Across Heterogeneous Systems*” (50%), a distributed systems project in a basic research program financed by NFR
- On *Sabbatical Leave* at Department of Computer Science, University of Cape Town, *Cape Town - South Africa* (Autumn Semester)

1999

- Lectured the course *Operating Systems & Computer Architecture* (50%) at NTNU
- Lectured the course *Distributed Systems* at NTNU
- Lectured the course *Distributed Databases* at HIS
- Supervised *3 Diploma-students* at NTNU (Jan Alfred Hegg & Bjørn Wager Korneliussen; Rune Selvåg)
- Supervised *5 Project-students* at NTNU (Geir Morten Allum & Thomas Løken; Thomas Holt & Rune Selvåg; Jan Helge Skailand)

- Supervised 3 *Diploma-students* at HIS (Atle Baldersheim; Rolf Holte; Frank Roger Vallestad)
- Supervised 1 *Diploma-student* at KUT (Jürgen Wilholt), Karlsruhe University of Technology - Karlsruhe, Germany
- Chaired the *NTNU Students' Excursion* to California, USA
- Revised the current *Curriculum Program* for the *Professional Computer Science* students at NTNU
- Started work on an NTNU committee *Tightening the Industrial Cooperation* with Alcatel
- Participated in the project “*CAGIS - Cooperating Agents in the Global Information Space*”, a distributed systems project in a basic research program financed by NFR
- Participated in 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

1998

- Lectured the course *Distributed Databases* at NTNU (Ph.D.-level)
- Lectured the course *Operating Systems* at NTNU
- Lectured the course *Distributed Databases* at HIS
- Started supervision of a *2nd Dr.Ing.-student* at NTNU (Erlend Tøssebro)
- Supervised 2 *Diploma-students* at NTNU (Tonny Gundersen & Frank Olsen)
- Supervised 4 *Project-students* at NTNU (Thorvald Bøe, Tonny Gundersen & Frank Olsen; Lars Ivar Almlı)
- Developed three new courses - *Operating Systems, Distributed Systems & Distributed Databases (Ph.D.-level)* - for NTNU
- Designed a new *Curriculum Program* for the *Professional Computer Science* students at NTNU
- Revised an existing report on *Continuing Education in Computer Science* at NTNU
- Worked on an NTNU committee for *Strengthening the Future* of NTNU
- Worked on an NTNU committee for *Evaluating the Potential of MSCs as Teachers*
- Participated in the project “*CAGIS - Cooperating Agents in the Global Information Space*”, a distributed systems project in a basic research program financed by NFR
- Participated in 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
- Reviewed the project “*TRENDS - Traffic Engineering Network Data Service*”, an EU project for the integration of database technology aspects into transportation informatics

1997

- Managed 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
- Participated in 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 the project “*ACTRANS - A Transaction Processing Toolkit for ACTS*”, an EU project for the integration of transaction management aspects into telecom applications
- Reviewed the project “*TRENDS - Traffic Engineering Network Data Service*”, an EU project for the integration of database technology aspects into transportation informatics
- Employed as *Full Professor* at NTNU
- Employed as *Adjunct Professor* at HIS
- Lectured the course *Introduction to Computer Science* at NTNU

- Lectured the course *Geographical Database Systems* (25%) at NLH (Ph.D.-level)
- Started supervision of a *1st Dr.Ing.-student* at NTNU (Heri Ramampiaro)
- Supervised *1 Diploma-student* at NTNU (Pengyang Lu)
- Censored *2 Diploma theses* at UIO (Bahman Farhanieh; Bjørn Holte Johansen)
- Participated in the project “*CAGIS - Cooperating Agents in the Global Information Space*”, a distributed systems project in a basic research program financed by NFR

1996

- Managed and participated in the project “*OSLO NATIONAL AIRPORT - Traffic Information Systems*”, a multi-client consultancy program for the national air transport authorities
- Managed 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
- Developed the project “*OMODIS - Object-Oriented Modelling and Database Support for Distributed Multimedia Systems*” (25%), a distributed systems project in a basic research program financed by NFR
- Participated in the project “*ACTRANS - A Transaction Processing Toolkit for ACTS*”, an EU project for the integration of transaction management aspects into telecom applications
- Reviewed the project “*TRENDS - Traffic Engineering Network Data Service*”, an EU project for the integration of database technology aspects into transportation informatics
- Managed the project and lectured the course *Introduction to Programming* for NTNU
- Managed the project and lectured the course *Distributed Databases* for HSR (at M.Sc.- level)
- Conducted several managerial activities at NLH
- Censored *1 Diploma thesis* at UIO (Q. R. Y. Gregory)
- Carried out strategic planning and marketing of the department and the institute in the database systems and distributed systems fields, including participation in the internal projects “*DBT - Data Base Team*” and “*FAMOUS - Flexible Architecture and Methodology for Distributed Systems*”

1995

- Managed and participated in the project “*OSLO NATIONAL AIRPORT - Traffic Information Systems*”, a multi-client consultancy program for the national air transport authorities
- Initiated 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 the project and lectured the course *Distributed Databases* for HSR (at M.Sc.- level)
- Lectured the course *Distributed Systems* (at M.Sc.-level) and conducted a respecification of the subject curriculum at NLH
- Censored *1 Diploma thesis* at HIS (Kjell Erik Hofland)

1994

- Employed as Adjunct Professor at NLH
- Managed and participated in the project “*OSLO NATIONAL AIRPORT - Traffic Information Systems*”, a multi-client consultancy program for the national air transport authorities
- Participated in the project “*OSLO NATIONAL AIRPORT - Information Modelling and Systems Integration*”, a multi-client consultancy project for the national air transport authorities
- Managed the project and lectured the course *Distributed Databases* for HSR (at M.Sc.- level)

- Held a seminar-series on “*Advanced Topics on Database Systems*” (at Ph.D.-level) and conducted a respecification of the subject curriculum at NLH
- Censored 1 *Diploma thesis* at NTH (Øystein Bøen & Erik Rondeel)

1993

- Promoted to Principal Research Scientist in the Database Technology Section
- Participated in 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
- Participated in the project “*Information Technology and Freight Management*”, a work concerning the integration and exploitation of information systems for freight transportation, financed by NTNF and several Norwegian industrial companies
- Emphasized internal coordination within and conducted external marketing of DELAB & SINTEF in the database systems field, including specification and negotiation of “*GRACE - Grouping for Research into Advanced CCI for EUROPE*”, a multinational (seven countries) proposal for an R&D project in the EUCLID-VI program
- Emphasized internal cooperation within and conducted external planning for DELAB & SINTEF in the transportation engineering field, including preparation of several strategic documents - also including specification and negotiation of “*OSLO NATIONAL AIRPORT - Traffic Information Systems*”, a multi-client consultancy program for the national air transport authorities, and “*ROAD TRAFFIC CENTRALS - Integration and Extension*”, a multi-client R&D program for the national road transport authorities

1992

- Managed and participated in the project “*IT in Transportation Engineering - Cross coupling of Products and Applications*”, a work concerning the reuse of concepts and components among several different areas within transportation informatics, financed by SIEMENS and NTNF
- Participated in the project “*IT in Road Transport - Registration and Control*”, a work concerning an extension from surveillance via tutoring to enforcement techniques within transportation informatics, financed by Datainstrument, ScanMatic, Informasjons-kontroll and NTNF
- Participated in 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
- Held “*Advanced Course on Organizational Issues*” and “*Advanced Course on Negotiation Techniques*” for NIF
- Carried out strategic planning and marketing of the section & DELAB in the database systems field, including cooperation within the knowledge engineering area and presentation of SINTEF at the CEBIT’92-conference in Hanover, Germany
- Carried out planning and marketing of the section & DELAB in the transportation engineering field, including preparation of several strategic documents and organization of a multinational panel debate with information technology and transportation engineering experts at the VNIS’92-conference in Oslo, Norway
- Finished work in OECD Task Force MC5 on “*Evaluative Research of Road-Vehicle Communication Systems*”, a research project on the use of information technology in transportation engineering
- Censored 1 *Diploma thesis* at NTH (Atle Johsen)

1991

- Managed and participated in the project “*REPTTEL - Coupling of REPLIC and TELSTØTT*”, a work designing and implementing a specific replicated distributed database - and extending previous works for STC, FFI and TF, a research & development project for FFI
- Managed and participated in the project “*IT in Road Transport - Components and Systems*”, a work concerning the system requirements and architectural aspects of transportation informatics, financed by SIEMENS and NTNF

- Participated in the project “*IT in Road Transport - Registration and Control*”, a work concerning an extension from surveillance via tutoring to enforcement techniques within transportation informatics, financed by Datainstrument, ScanMatic, Informal- scans-control and NTNf
- Held “*Advanced Course on Organizational Issues*” for NIF
- Carried out strategic planning and marketing of the section & DELAB in the database systems field, including specification and negotiation of “*EIDER - Enhanced Interoperability for Data Repositories and Environments*”, a multinational (six countries) bid for an R&D project in the ESPRIT-III program
- Carried out planning and marketing of the section & DELAB in the transportation engineering field, including preparation of several strategic documents and organization of two bilateral workshops with information technology and transportation engineering experts at SIEMENS in Berlin & Munich, Germany
- Continued work in OECD Task Force MC5 on “*Evaluative Research of Road-Vehicle Communication Systems*”, a research project on the use of information technology in transportation engineering
- Censored 3 *Diploma theses* at NTH (Finn Dag Buø; Erik Lyngra; Carl Christian Malm)

1990

- Managed and participated in the project “*ATCCIS - With Higher Availability*”, a work investigating an existing trade-off in replicated distributed databases - and extending a previous work for STC and FFI, a research & development project for FFI
- Held “*Advanced Course on Negotiation Techniques*” for NIF
- Managed and participated in the project “*REPTTEL - Coupling of REPLIC and TELSTØTT*”, a work designing and implementing a specific replicated distributed database - and extending previous works for STC, FFI and TF, a research & development project for FFI
- Held seminar-series at NTH & ELAB-RUNIT on “*Deductive Databases*”
- Managed and participated in the project “*Strategic Product Development - Information Technology in Transportation Engineering*”, a work trying to create a basis for the Norwegian industrial and service production in the transportation sector, financed by SIEMENS, MicroDesign and NTNf
- Defended successfully Dr. Techn.-thesis
- Continued work in OECD Task Force MC5 on “*Evaluative Research of Road-Vehicle Communication Systems*”, a research project on the use of information technology in transportation engineering

1989

- Became Research Manager in the Database Technology Section
- Became Market Coordinator for “*Information Technology in Transportation Engineering*”
- Managed and participated in the project “*ATCCIS - With Higher Availability*”, a work investigating an existing trade-off in replicated distributed databases - and extending a previous work for STC and FFI, a research & development project for FFI
- Carried out marketing of the section & ELAB-RUNIT, including specification and negotiation of “*ATCCIS - With Extended Features*”, a restricted work on replicated distributed databases extending a previous work for STC and FFI, a research & development project for STC
- Participated in the project “*Research Areas - Information Technology in Transportation Engineering*”, a work aimed at investigation and extraction of interesting and promising areas for a combination of two separate research fields, financed by NTNf
- Initiated work in OECD Task Force MC5 on “*Evaluative Research of Road-Vehicle Communication Systems*”, a research project on the use of information technology in transportation engineering

1988

- Managed 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

- Finished work on extension of Dr.Ing.-thesis to Dr.Techn.-thesis
- Managed and participated in the project “PACS - Picture Archive and Communication System”, a work trying to integrate text, picture and voice with on-line and off-line data repositories, a research & development project for ND, financed by NTNF, DnR and RiT

1987

- Became Research Scientist in the Database Technology Section
- Initiated work on extension of Dr.Ing.-thesis to Dr.Techn.-thesis
- Held seminar-series at NTH & RUNIT-F on “Normalization Theory”
- Carried out marketing of RUNIT-F, including a workshop with ND in Oslo, Norway

1986

- Managed and participated in the subproject “Theoretical Foundations of Asynchronous Parallel Processes” of the research project “Parallel Technology”, a work trying to pinpoint, extract and develop further the genuine inherent properties of parallel systems, financed by NTNF
- Participated in the subproject “Parallelism in Database Management Systems” of the research project “Parallel Technology”, a work investigating the effects on concurrency control and error recovery of making specific choices regarding system architecture and operation algorithm given the trend regarding data access time vs. data transmission time, financed by NTNF
- Managed and carried out the first part of the research and training project “OIDA”, an education program at M.Sc.- level in Computer Science for 20 students in Stavanger, Norway, financed by STATOIL. Developed the curriculum and negotiated the contract, both during several stays in Stavanger, Norway
- Carried out marketing of the section & RUNIT, including workshops with BSC, CMI and UIB all in Bergen, Norway

1985

- Became Section Head in the Parallel Technology Section with 5 researchers and 1 secretary
- Participated in the design of “Multiple CPU CMS” - a multi processor runtime system for the CHILL language, a development project for STK
- Built up the new research section administratively and professionally from scratch, including arranging a section-seminar at Rørås, Norway
- Carried out heavy marketing of the section, including running a workshop with Tele- Nova in Stockholm, Sweden

1984

- Continued work on Dr.Ing.-thesis
- Managed 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

1983

- Started work on Dr.Ing.-thesis
- Lectured *Computers and Programming - Part II*
- Participated in 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
- Joined RUNIT/SINTEF as Research Scientist in the Computer Networks Section
- Managed the project and lectured *Computers and Programming - Part I* (for IDB/ NTH)

1982

- Studied and passed examination in 2. half of necessary Dr.Ing.-courses

- Lectured *Programming in Cobol*, *Advanced Operating Systems* (at Ph.D.-level), *Advanced Distributed Data Processing* (at Ph.D.-level), *Programming in Cobol*, and *Computers and Programming* (for foreign students)

1981

- Lectured *Computers and Programming - Part II*, *Programming in Cobol*, and *Distributed Data Processing* (for computer industry people)
- Held seminar-series at EB on “*Operating Systems*” and at RUNIT & TF on “*Network Operating Systems*”
- Participated in a research project “*Distributed Data Processing*”, a work done by RUNIT to make clear current state-of-the-art in the indicated research field both nationally and internationally, financed by TF
- Managed and participated in the implementation of “*Jensen’s Device*” - a micro processor based timing system for sport events, a development project for Hadeland Products
- Became University Fellow
- Studied and passed examination in 1. half of necessary Dr.Ing.-courses
- Lectured *Assembly Programming*, *Computers and Programming* (for foreign students), *Advanced Database Systems* (at Ph.D.-level), and *Distributed Data Processing* (at Ph.D.-level)

1980

- Lectured *Computers and Programming - Part II*, *Programming in Cobol*, *Computers and Programming - Part I*, *Assembly Programming*, and *Computers and Programming* (for foreign students)
- Held seminar-series at EB on “*Operating Systems*” and at RUNIT & TF on “*Distributed Data Processing*”
- Participated in the research project “*Distributed Data Processing*”, a work done by RUNIT to make clear current state-of-the-art in the indicated research field both nationally and internationally, financed by TF
- Managed and participated in the design of “*Jensen’s Device*” - a micro processor based timing system for sport events, a development project for Hadeland Products

1979

- Joined COMTEC/NOBØ as Systems Programmer
- Worked with communication protocols to be used on the public data network, a development project for TF
- Joined IDB/NTH as Research Assistant
- Wrote a text book on how to use ND-computers
- Held seminars at RUNIT & KIS on “*Concurrent Pascal*”
- Became Assistant Professor
- Lectured *Computers and Programming - Part I*, *Assembly Programming*, and *Computers and Programming* (for foreign students)
- Held seminars at EB on “*Concurrent Pascal*” and at COMTEC on “*Programming Languages*”

FURTHER TRAINING:

EXTERNAL CONFERENCES

2004

- (1) VLDB Endowment:
29. International Conference on Very Large Data Bases;
Toronto, Canada
- (2) University of Athens:
16. International Conference on Scientific and Statistical Database Management;
Santorini, Greece
- (3) University College Cork:
3. International Symposium on Parallel and Distributed Computing;
Cork, Ireland

2003

- (4) VLDB Endowment:
28. International Conference on Very Large Data Bases;
Berlin, Germany

2001

- (5) VLDB Endowment:
27. International Conference on Very Large Data Bases;
Rome, Italy

2000

- (6) VLDB Endowment:
26. International Conference on Very Large Data Bases;
Cairo, Egypt

1999

- (7) VLDB Endowment:
25. International Conference on Very Large Data Bases;
Edinburgh, Scotland

1998

- (8) VLDB Endowment:
24. International Conference on Very Large Data Bases;
New York, USA
- (9) COOPIS:
3. International Conference on Cooperative Information Systems;
New York, USA

1992

- (10) Norwegian Institute of Technology:
Nordic Seminar on Dependable Computing Systems;
Trondheim, Norway

1991

- (11) ISATA Group:
24. Isata International Symposium on Automotive Technology and Automation;
Florence, Italy

1989

- (12) VLDB Endowment:
15. International Conference on Very Large Data Bases;
Amsterdam, Netherlands

1986

- (13) Nato Advanced Study Institute:
Distributed Operating Systems - Theory and Practice;
Izmir, Turkey
- (14) Education Foundation of the Data Processing Management Association:
Parallel Processing Seminar;
Paris, France
- (15) Chr. Michelsen Institute:
An International Conference on Vector and Parallel Computing;
Loen, Norway

1983

- (16) VLDB Endowment:
9. International Conference on Very Large Data Bases;
Florence, Italy

1982

- (17) IEEE Computer Society:
3. International Conference on Distributed Computing Systems;
Miami, USA

1981

- (18) Technical University Munich:
Advanced Course on Distributed Systems - Architecture and Implementation;
Munich, West-Germany

1980

- (19) IEEE Computer Society:
21. IEEE Computer Society International Conference on Distributed Computing;
Washington, USA

INTERNAL COURSES

1997

- (1) Internal NTNU course:
“**How to teach in a better way**” (in Norwegian);
Selbu/Trondheim, Norway

1993

- (2) Internal SINTEF course:
“**Technology Management**” (in Norwegian);
Hommelvik/Trondheim/Orkanger, Norway

1986

- (3) Internal RUNIT course:
“**Managing Software Projects**”;
Trondheim, Norway
- (4) Norwegian Society of Chartered Engineers:
“**Advanced Course on Negotiation Techniques**” (in Norwegian);
Hønefoss, Norway

1985

- (5) Internal SINTEF course:
“**Research Management**” (in Norwegian);
Kyrksæterøra, Norway
- (6) Norwegian Society of Chartered Engineers:
“**Advanced Course on Organizational Issues**” (in Norwegian);
Oslo, Norway

1983

- (7) Internal IDB course:
“**Managing Customers**” (in Norwegian);
Trondheim, Norway

ABBREVIATIONS USED:

| | |
|-------------|---|
| UHR | Norwegian Association of Higher Education Institutions |
| NRT | Norwegian National Council for Technology |
| IDB/IDT/IDI | Department of Computer and Information Science |
| ITEM | Department of Telematics |
| FIM | Faculty of Physics, Informatics and Mathematics |
| IME | Faculty of Information Technology, Mathematics and Electrical Engineering |
| NTH/NTNU | Norwegian University of Science and Technology |
| IED | Department of Electrical and Computer Engineering |
| HSR/HIS/UIS | University of Stavanger |
| IMF | Department of Mathematical Sciences |
| NLH/UMB | Norwegian University of Life Sciences |
| UNIK | University Graduate Center at Kjeller |
| UIT | University of Trondheim |
| UIB | University of Bergen |
| UIO | University of Oslo |
| UITR | University of Tromsø |
| HIO | Oslo College |
| HIB | Bergen College |
| HIG | Gjøvik College |
| HSF | Finnmark College |
| KIS | Kongsberg School of Engineering |
| CESAER | European organization for technology universities |
| N5T | Nordic alliance among technology universities |
| NORDTEK | Nordic association of technology universities and university colleges |
| KUT | Karlsruhe University of Technology |
| UoO | University of Oxford Oxford, England |
| UoR | University of Rome Rome, Italy |
| UoN | University of Nice Nice, France |
| UJF | Université Joseph Fourier Grenoble, France |
| AAU | Aarhus University Aarhus, Denmark |
| GIT | Georgia Institute of Technology Atlanta., USA |
| VUB | Vrije Universiteit Brussel Brussels, Belgium |
| UoM | University of Maryland Maryland College Park, USA |

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| GU | Georgetown University Washington D.C., USA |
| IC | Imperial College London, England |
| UCT | University of Cape Town Cape Town, South Africa |
| AIT | Asian Institute of Technology Bangkok, Thailand |
| BIS | Beijing Institute of Software (Beijing Institute of Computing Technology/ Beijing Institute of Information Management) Beijing, China |
| RUNIT/ RUNIT-F ELAB-RUNIT/ DELAB TELEC. & INF. SINTEF | Computing Centre at the University of Trondheim Computing and Electronics Laboratory at the Norwegian Institute of Technology Telecom and Informatics Institute Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology |
| CMI | Chr. Michelsen Institute (with Computer Science research) |
| BSC | Bergen Scientific Centre (IBM-Norway research institute) |
| KD | Norwegian Ministry of Education and Research |
| NÆR. & IND. DEPARTEM. | Norwegian Ministries for Business and Industry |
| TF | Norwegian Telecom. Administration Research Establishment |
| FFI | Norwegian Defence Research Establishment |
| STC | Shape Technology Centre (NATO research institute) |
| EB | Norwegian electronics manufacturer |
| STK | Norwegian electronics manufacturer |
| COMTEC NOBØ | Norwegian software manufacturer |
| Datainstrument | Norwegian software & hardware manufacturer |
| ScanMatic | Norwegian software & hardware manufacturer |
| Informasjons- kontroll | Norwegian software & hardware manufacturer |
| MicroDesign | Norwegian software & hardware manufacturer |
| ND | Norwegian software & hardware manufacturer |
| Hadeland Products | Norwegian hardware manufacturer |
| SIEMENS | Norwegian/German software & hardware manufacturer |
| KVATRO Telecom | Norwegian software manufacturer & marketer |
| TeleNova | Swedish software manufacturer & marketer |

| | |
|-------------|---|
| OHAS | Oslo National Airport |
| STATOIL | The Norwegian Oil Company |
| RiT | University Hospital of Trondheim |
| DnR | The Norwegian Radium Hospital |
| NTNF | Royal Norwegian Council for Scientific and Industrial Research |
| NFR | Royal Norwegian Council for Research |
| NNR | Norwegian Educational Networking Council |
| ERCIM | European Research Consortium for Informatics and Mathematics |
| Cost 11 Bis | European Community R&D project |
| ESPRIT-III | European Community R&D program |
| EUCLID-VI | European Community R&D program |
| EU | European Union |
| OECD | Organisation for Economic Cooperation and Development |
| UNDP | United Nations Development Program |
| DND | Norwegian Computer Society |
| NIF | Norwegian Society of Chartered Engineers |
| TEKNA | Norwegian Society of Chartered Technical and Scientific Professionals |
| ISAS | Norwegian Chartered Engineers' Service Company |
| AKADEMICS | Federation of Norwegian Professional Associations |
| IN | Nordic Industry Employees' Association |
| NITO | Norwegian Society of Engineers and Technologists |
| FF | Norwegian Association of Researchers |