

# Curriculum Vitæ

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Anders Andersen

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## Personal information

*Born:* November 17, 1967, Vadsø, Norway

*Nationality:* Norwegian

*Languages:* Norwegian and english

*Marital status:* Married to Merete Saus

*Children:* Brynjar Andersen Saus, born March 7, 1996  
Ingeborg Andersen Saus, born February 10, 2007

*Education:* Dr. Scient. (PhD), University of Tromsø, May 2002  
Sivilingeniør (Master), University of Tromsø, December 1991

*Occupation:* Chair / Professor

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*Research and teaching experience is documented in the «Research work overview» and in the «Teaching CV». The «Research work overview» and the «Teaching CV» is attached to this CV. The more detailed «Research portfolio» and «Teaching portfolio» are not included.*

*Publications are presented in the separate publication list attached to this CV. Numbers in square braces in this CV, in the Research work overview, and in the Teaching CV, refer to publications in the attached publication list.*

## Present occupation

**Chair** Chair (Head of department) at the Department of Computer Science, UiT The Arctic University of Norway, from June 2019.

**Professor** Professor at Department of Computer Science, UiT The Arctic University of Norway, from 2018.

## Education

**UHR-Dekanskolen** UHR leadership program for Deans, 2020–2021.

**The UiT leader program** The UiT program for leadership development, 2019.

**Innovation management** BLU3713/BLU3714, BI Norwegian Business School, 2014–2015. [115]

**The Research Leader Program** Forskningslederprogrammet, FLP8, University of Oslo, 2014.

**Dr. Scient. (PhD)** Dr. student, the University of Tromsø, 1995–2002. [116]

**Visiting PhD-student** Visiting PhD-student at Distributed Multimedia Systems Research Group, Computing Department, Lancaster University, from February to August and from October to December 1997.

**Sivilingeniør** Sivilingeniør (Master of Engineering) in computer science, University of Tromsø, 1987–1991. [117]

## Work experience

**Senior Advisor** Senior Advisor (seniorrådgiver), part time position, Jupiter AS, 2018–2020, 2023–.

**Vice Chair** Vice Chair at the Department of Computer Science, UiT The Arctic University of Norway from August 2016 to May 2019 (temporarily engaged as Chair at the department March–June 2018).

**Associate Professor** Associate Professor at Department of Computer Science, UiT The Arctic University of Norway, 1999–2018.

**Chief Scientist** Chief Scientist, Invenia AS, part time position, 2010–2017.

**Chief Scientist** Chief Scientist, Invenia iLab AS, part time position, 2009–2010.

**Chief Scientist** Chief Scientist, Invenia AS, part time position, 2006–2009.

**Vice Chair** Vice Chair, Department of Computer Science, UiT The Arctic University of Norway, 2006–2010.

**Partner** Partner, Invenia Innovation AS, from 2000 to 2009.

**Researcher/Dr. student** Researcher/Dr. student, NORUT Information Technology AS and University of Tromsø between February 1995 and November 1999.

**Assistant Professor** Assistant Professor (qualifying) at the computing department, Hedmark College from August 1993 to February 1995.

**Partner** Partner of TromsTech DA, 1993.

**Assistant Professor** Temporarily engagement, Assistant Professor at the University of Tromsø, Spring 1992.

*(Only work experience after completing the master degree in December 1991 is included here.)*

## Work related positions of trust

**Universities Norway (UHR)** Member of the Working committee for National Council for Informatics (Arbeidsutvalget for Nasjonalt fagråd for informatikk, NFI), Universities Norway (Universitets- og høyskolerådet, UHR), from 2019.

**UiT The Arctic University of Norway** Member of the Security Advisory Board (Informasjonssikkerhetsforumet) at UiT The Arctic University of Norway, from 2019.

**Ministry of Trade, Industry and Fisheries, Norway** Member of work group More transparency about shareholders (Større åpenhet om aksjeeiere), Appointed by the Minister of Trade and Industry, Spring 2024

**Næringsforeningen** Member of the Technology council (previously Fagrådet IT) Næringsforeningen i Tromsøregionen, 2018–2024.

**OsloMet** Member of selection committee for professor position in AI in distributed multimedia systems, OsloMet, Autumn 2022.

**NTNU** Member of selection committee for Associate professor position within AI, NTNU Ålesund, Spring 2022.

**Kristiania** Member of selection committee for Professor position in information technology, Kristiania, Autumn 2021.

**OsloMet** Member of selection committee for Professor position in applied computer security at OsloMet, Spring 2020.

**UiT The Arctic University of Norway** Member of selection committee for position at the University Library, Spring 2020.

**UiT The Arctic University of Norway** Member of panel for evaluation of Joint services at UiT, 2020.

**University of Tromsø** Executive member of board, Department of Computer Science, 2017–2019.

**UiT The Arctic University of Norway** Member of selection committee for position at the University Library, Autumn 2018.

**UiT The Arctic University of Norway** Temporary engaged as chair of the Department of Computer Science 2018 (3 months).

**University of Tromsø** Substitute executive member of board, Department of Computer Science, 2004–2009, 2013–2017.

**UiT The Arctic University of Norway** Vice chair at Department of Computer Science from 2016.

**University of Tromsø** ODS research group leader, Department of Computer Science, 2006–2010, 2013–2015.

**UiT The Arctic University of Norway** Member of selection committee for a Post. Doc. position at Department of Computer Science, March 2015.

**University of Tromsø** Member of board, Department of Computer Science, 2009–2013.

**University of Tromsø** Vice chair Department of Computer Science, 2009–2010.

**University of Tromsø** Member of strategy committee for research and development, Faculty of Science and Technology, 2009.

**University of Tromsø** Member of strategy committee for education, Faculty of Science and Technology, 2009.

**Invenia Innovation AS** Member of board 1999–2008.

**Hedmark College** Member of selection committee for 3–4 teaching (or Associate Professor) positions in informatics, Autumn 2001.

**University of Tromsø** Member of selection committee for an administrative position at Faculty of Science, April 2000.

**Norrøna Barnehage AS** Member of board 1999–2002.

**NIF** Executive member of NIF-P (labor union) at NORUT IT from spring 1996 to spring 2000.

**University of Tromsø** Students representative in the Department of Computer Science collegium, University of Tromsø, 1991.

## Other positions of trust

**Tromsø klatreklubb** Member of board from 2023.

**Troms Orienteringskrets** Member of board 2010–2012.

**BUL Tromsø orientering** Member of nominating committee for Troms orieneteringskrets board 2012.

**BUL Tromsø orientering** Member of committee for “Familiesport” 2009–2011, leader 2012.

**BUL Tromsø orientering** Member of nominating committee for BUL Tromsø orientering board 2012.

**Tromsø chess club youth** Leader 2007–2010.

**BUL Tromsø orientering** Leader network/communication Norwegian national championship orienteering 2007.

**CandiData** Executive member of CandiData (alumni organization for Department of Computer Science, UiT) from spring 1995. Leader between spring 1998 and spring 2000.

**DnD** Substitute executive member of DnD (Dataforeningen) Troms from spring 1993 to autumn 1993.

**Vadsø Skiklubb** Responsible for individual tracks in the North-Norwegian Orienteering championship 1991.

**Tromsøstudentenes Dataforening** Executive member of Tromsøstudentenes Dataforening from spring 1988 to autumn 1990.

**Vadsø Badmintonklubb** Executive member 1985.

**Vadsø Skiklubb** Executive member of the orienteering group 1984–1985.

# Teaching CV

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*A more detailed Teaching portfolio is available in a separate document.*

## Teaching related positions

**Professor** Professor at Department of Computer Science, UiT The Arctic University of Norway, from 2018.

**Teaching Responsible** Teaching responsible at the Department of Computer Science, UiT The Arctic University of Norway from August 2016 to May 2019.

**Associate Professor** Associate Professor at Department of Computer Science, UiT The Arctic University of Norway, 1999–2018.

**Teaching** Temporarily engagement, part time Lecturer, University of Nordland, Spring 2010 (Bodø), Autumn 2011 (Brønnøysund), and Spring 2012 (Bodø).

**Teaching Responsible** Teaching Responsible, Department of Computer Science, UiT The Arctic University of Norway, 2006–2010.

**Teaching** Temporarily engagement, part time Lecturer at Hedmark College, spring 2002, autumn 2002, and spring 2003.

**Teaching** Temporarily engagement, Teaching, University of Tromsø, Autumn 1995 (multi-media seminar).

**Teaching** Temporarily engagement, part time Lecturer, Hedmark College, Spring 1995.

**Assistant Professor** Assistant Professor (qualifying) at the computing department, Hedmark College from August 1993 to February 1995.

**Teaching** Temporarily engagement, Teaching at the University of Tromsø, Autumn 1992 (operating systems) and Spring 1993 (formal methods).

**Assistant Professor** Temporarily engagement, Assistant Professor at the University of Tromsø, Spring 1992.

**Teaching assistant** Temporarily engagement, part time Teaching assistant at the University of Tromsø, spring 1990, autumn 1990 and spring 1991.

## Teaching related courses and formal competence

**Education management** Arbeidsseminar mottak og førstesemester, NFYE – Kompetansedeling for studenter suksess i høyere utdanning, Trondheim, March 2019.

**Study program management** Dialogkonferanse om ledelse av studieprogram, UiT The Arctic University of Norway, February 2019.

**UiT research supervision** UiT course on research supervision (forskningsveiledning), 2018–2019.

**PhD supervision** NT-faculty PhD-supervisor seminar, UiT The Arctic University of Norway, February 2019.

**Education** Rom for aktive studenter, UiT The Arctic University of Norway, 2018.

**Education management** Workshop om prosjektevaluering for prosjektledere og mottakere av prosjektmidler for utdanningskvalitet 2017 (Adriana Briseno-Garzon, University of British Columbia), October 2018.

**Education** Hvordan tilrettelegge gode mentorordninger? Kompetansedeling for studenters suksess i høyere utdanning, Tromsø, October 2018.

**Education** Fyrtårnskonferanse 2018: Studentaktiv læring og kreative læringsformer, UiT The Arctic University of Norway, May 2018.

**Education** Undervisningsseminar NT-fak, UiT The Arctic University of Norway, January 2018.

**Education** MNT konferansen 2017: Transformative education, Nasjonalt senter for realfagsrekruttering, Oslo, March 2017.

**Education management** Seminar om ledelse av studieprogram, UiT The Arctic University of Norway, February 2017.

## Teaching related positions of trust

**UiT The Arctic University of Norway** Member of the Program board for the experienced based master program Ocean Leadership, from 2022.

**UiT The Arctic University of Norway** Member of the Program board for University pedagogy at UiT, from 2020.

**UHR** Working group for Revised guidelines for the degree Master of engineering (Sivilingeniør), 2022.

**UiT The Arctic University of Norway** Member of the Planning and program committee for the NT-faculty PhD-supervisor seminar 2019.

**UiT The Arctic University of Norway** Leader of the work group for Cyber Security studies at the Department of Computer Science, Faculty of Science and Technology, 2018–2019.

**UiT The Arctic University of Norway** Member of the work group working on establishing a new master program in computer science at Mo i Rana, from 2018–2019.

**UiT The Arctic University of Norway** Responsible for teaching and teaching plans at Department of Computer Science, from 2016–2019.

**UiT The Arctic University of Norway** Member of education board at Faculty of Science and Technology (SU NT-fak), from 2016–2019.

**UiT The Arctic University of Norway** Member of program board for teacher training in scientific subjects, from 2016–2019.

**UiT The Arctic University of Norway** Leading the process of accreditation of the study programs at the Department of Computer Science, 2018.

**UiT The Arctic University of Norway** Member of project group for increased throughput and reduced drop-out in studies, Faculty of Science and Technology, 2017–2018.

**UiT The Arctic University of Norway** Leading the work on the final implementation of the Health Technology study at the Department of Computer Science, 2016–2018.

**UiT The Arctic University of Norway** Member of steering committee for Health Technology studies, Faculty of Science and Technology, 2016–2018.

**UiT The Arctic University of Norway** Leading the work group for Inf-1049, Introduction to Scientific programming, Faculty of Science and Technology, 2016–2017.

**UiT The Arctic University of Norway** Responsible for teaching and teaching plans at Department of Computer Science 2016–2019.

**University of Tromsø** Member of program board for teacher training in scientific subjects 2007–2010.

**University of Tromsø** Responsible for teaching and teaching plans Department of Computer Science, 2006–2010.

**University of Tromsø** Member of program board for telemedicine and e-health studies 2007–2009.

**University of Tromsø** Member of faculty research education board 2006–2009.

**University of Tromsø** Member of program board for master studies in technology 2006–2009.

**University of Tromsø** Member of faculty education board 2006–2009.

**NOKUT** Leader of committee evaluating 2 new Master study programs at “Høgskolen i Gjøvik” 2004.

**University of Tromsø** Leader of admission committee civil engineering study 2002.

**University of Tromsø** Leader of the admission committee for the study for graduate engineer, Summer 2000.

## Teaching related work groups and projects

**ICT-security in education programs** Work group on ICT Security in study programs, for the Norwegian Association of Higher Education Institutions (Universitets- og høyskolerådet, UHR), 2018–2021. The work group investigated how to strengthen ICT security knowledge in education programs. The workgroup was appointed by the Norwegian Association of Higher Education Institutions (UHR) on behalf of the Ministry of Education and Research. *My role: Leading the work group.* [118, 119, 121, 26]

**Informatikkutdanninger i Nordland** Implementation of two new Study programs in Nordland, starting 2023: Bachelor in Informatics (Helgeland) and Master in Computer Science (Bodø). Successful application sent to strategic fund at UiT (Funding: NOK 12 800 000. Total size NOK 25 600 000). *My role: Project leader.* [120]

**Introduksjon til informatikk: 4 kurs** Implementation of an continuous learning (EVU) offer, autumn 2020. It included 4 courses in computer science: (i) Basic introduction to programming, (ii) Basic introduction to ICT security, (iii) Health and ICT: an introduction to health technology, and (iv) Basic introduction to artificial intelligence (AI) and machine learning (ML). Successful application sent to DIKU, Grants for online educational offer 2020 (Funding: NOK 765 000). *My role: Initiator and project leader.* [123]

**Ocean leadership** Work group for new cross-disciplinary master study in Ocean leadership at UiT The Arctic University of Norway, 2020. *My role: Member of the work group.* [122]

**Inf-1049** Leader for the work group for Inf-1049, Introduction to Scientific programming. The work group applied and received funding from Faculty of Science and Technology at UiT The Arctic University of Norway to develop this new course in scientific programming for non-computer science students at the faculty, 2017. (Funding: NOK 400 000). [125]

**ITBeregning** Leader for the project ITBeregning (Introduksjon til beregningsorientert programmering: fremragende læring med beregningsmetoder), for better learning with the integration of programming in scientific study programs. The work group applied for funding from the Result program Improved quality in teaching, UiT the Arctic University of Norway. Utviklingsmidler, Program for undervisningskvalitet, 2017 (Funding: NOK 250 000). [126]

## Supervision

**PhD** Salman Khaleghian. Scalable computing for earth observation: Application on Sea Ice analysis, 2022. [194]

**PhD** Najeeb Elahi. Context Centric Approach of Semantic Image Annotation and Retrieval, 2020. [195]

**PhD** Abul Ahsan Md Mahmudul Haque. Decentralized Orchestration of Open Services: Achieving High Scalability and Reliability with Continuation-Passing Messaging, 2017. [196]

**PhD** Kassaye Yitbarek Yigzaw. Towards Practical Privacy-Preserving Distributed Statistical Computation of Health Data, 2017. [197]

**PhD** Luis Fernandez-Luque. HealthTrust: trust-based retrieval of health social media videos, 2014. [198]

**PhD** Arne Munch-Ellingsen. An Extensible, Pervasive Systems, Application Server, 2009. [199]

**PhD** Njål T. Borch. Socialized.Net - The design and implementation of a distributed social network, 2007. [200]

**PhD** Simone Lupetti. Information Protection – Information Sharing, 2007. [201]

**Master** 50 completed master students. [207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256].

**Currently** 3 active PhD students and 5 active master students.

## Coursework teaching and development

*In the table below, the courses I have taught and been responsible for are listed with the following meaning of the letters: A = Autumn, S = Spring, B = Bachelor level, M = Master level, P = PhD level. Inf-3320 and Inf-8320 are master- and PhD-level versions of the middleware course. Inf-3910-1 and Inf-8810-1 are master- and PhD-level versions of the UICC and NFC programming course. Inf-3701 and Inf-8701 are master- and PhD-level versions of the advanced database systems course. Courses marked with \*, I have developed or contributed significantly to the development. Courses marked with †, I have only lectured and not been responsible for.*

<b>2023 S</b>	M	Svf-3402	15 ECTS	Critical Global Challenges*, UiT
	B	Inf-2201	20 ECTS	Operating System Fundamentals, UiT
<b>2022 S</b>	B	Inf-2201	20 ECTS	Operating System Fundamentals, UiT
<b>2021 A</b>	B	Inf-1049	10 ECTS	Introduction to computational programming†, UiT
<b>2020 A</b>	B	Inf-1049	10 ECTS	Introduction to computational programming†, UiT
<b>2020 S</b>	B	Inf-2310	10 ECTS	Computer security†, UiT
<b>2019 A</b>	B	Inf-1049	10 ECTS	Introduction to computational programming†, UiT
<b>2019 S</b>	M	Inf-3910-3	10 ECTS	IoT / LoRaWAN*, UiT
	M	Inf-3701	10 ECTS	Advanced database systems†, UiT
<b>2018 A</b>	B	Inf-1049	10 ECTS	Introduction to computational programming*, UiT
<b>2018 S</b>	M	Inf-3910-3	10 ECTS	IoT / LoRaWAN*, UiT
	M	Inf-3701	10 ECTS	Advanced database systems†, UiT
	P	Inf-8701	10 ECTS	Advanced database systems†, UiT
<b>2017 A</b>	B	Inf-1049	10 ECTS	Introduction to computational programming*, UiT
<b>2017 S</b>	M	Inf-3910-3	10 ECTS	IoT / LoRaWAN*, UiT
<b>2016 A</b>	B	Inf-1100	10 ECTS	Introduction to programming and computer arch., UiT
	B	Inf-2301	10 ECTS	Computer communication and security*, UiT



<b>2015 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
	M	GameLab	10 ECTS	Misc. game development projects*, UiT
<b>2014 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2014 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
<b>2013 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2013 S</b>	B	Inf-1400	10 ECTS	Introduction to object-oriented programming, UiT
	M	Inf-3701	10 ECTS	Advanced database systems, UiT
	P	Inf-8701	10 ECTS	Advanced database systems, UiT
	M	Inf-3910-1	10 ECTS	UICC and NFC programming*, UiT
	P	Inf-8810-1	10 ECTS	UICC and NFC programming*, UiT
<b>2012 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2012 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
	B	IT125e	10 ECTS	Information security <sup>†</sup> , University of Nordland
<b>2011 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
	B	IT207e	10 ECTS	Computer security <sup>†</sup> , University of Nordland
<b>2010 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
<b>2009 A</b>	B	Inf-1100	10 ECTS	Introduction to programming*, UiT
<b>2009 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
<b>2008 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2008 S</b>	M	Inf-3701	10 ECTS	Advanced database systems, UiT
	P	Inf-8701	10 ECTS	Advanced database systems, UiT
<b>2007 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2006 A</b>	B	Inf-2301	10 ECTS	Computer communication and security*, UiT
<b>2005 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
<b>2004 A</b>	B	Inf-1100	10 ECTS	Introduction to programming*, UiT
<b>2004 S</b>	M	Inf-3320	10 ECTS	Middleware*, UiT
	P	Inf-8320	10 ECTS	Middleware*, UiT
<b>2003 A</b>	B	Inf-1100	10 ECTS	Introduction to programming*, UiT
<b>2003 S</b>	B	D-130	15 ECTS	Algorithms and data structures, UiT
	M	D-441s	15 ECTS	Middleware*, UiT
	B	3IN70	6 ECTS	Data communication 1*, Hedmark college
<b>2002 A</b>	B	D-110	15 ECTS	Introduction to programming*, UiT
	B	3IN73	9 ECTS	Data communication 2*, Hedmark college
<b>2002 S</b>	B	D-130	15 ECTS	Algorithms and data structures, UiT
	B	3IN70	6 ECTS	Data communication 1*, Hedmark college
<b>2001 A</b>	B	D-242	15 ECTS	Computer communication, UiT
<b>2001 S</b>	B	D-130	15 ECTS	Algorithms and data structures, UiT
<b>2000 A</b>	B	D-242	15 ECTS	Computer communication, UiT
<b>1995 S</b>	B	-	9 ECTS	Operating system*, Hedmark college
<b>1994 A</b>	B	-	6 ECTS	Data communication*, Hedmark college
<b>1994 S</b>	B	-	9 ECTS	Operating system*, Hedmark college
<b>1993 A</b>	B	-	6 ECTS	Introduction to mathematics, Hedmark college
<b>1992 S</b>	B	D-102	15 ECTS	Introduction to computers <sup>†</sup> , UiT

## Examiner

**PhD** I have been a member or the chair in a number of PhD committees. See the Expert reviewer section in the Research overview for a complete list.

**Master** I have been the examiner for a large number of master degrees at University of Oslo and UiT The Arctic University of Norway (University of Tromsø), from 1993.

**Courses** I have been the examiner for a large number of courses at a large number of Norwegian educational institutions, including University of Oslo, NTNU, Hedmark College, Nord University (Bodø Regional College), Østfold University College, from 1992.

## Publications and presentations

**UHR 2022** A presentation on implementing ICT-security in study programs, at UHR MNT professional meeting 2022. [63]

**UHR 2022** A presentation on implementing ICT-security in the engineering study programs, at UHR professional meeting on engineering education 2022. [65]

**Report ICT-security 2021** Report presenting recommended ICT-security learning outcomes, from the National working group for strengthening ICT security in study programs, 2021. [119]

**Report ICT-security 2021** Report presenting the recommendations from the National working group for strengthening ICT security in study programs, 2021. [118]

**MNT 2021** A presentation on implementing ICT-security in study programs, at the MNT conference 2021. [66]

**UHR 2020** ICT-security, a contribution (section) to the National guidelines for engineering education, 2020. [121]

**UHR fagråd IKT 2019** A presentation of the current status National workgroup on ICT-security in study programs, at UHR national professional councils for IKC-educations, November 2019. [67]

**Sikkerhetsfestivalen 2019** A presentation and a panel on strengthening the provision of teaching in ICT security, at the Security festival 2019. [68]

**NSM 2019** A presentation on the topic ICT-Security in education, at the NSM Security conference 2019. [69]

**MNT 2019** A report from the development of the course in scientific programming for non-computer science students at Faculty of Science and Technical, UiT The Arctic University of Norway, 2019. [27, 70]

**MNT 2019** A report from the work group «ICT Security» for Universities Norway (Universitets- og høskolerådet, UHR), 2019. [26, 71]

## Media

**Nordnorsk debatt** Newspaper chronicle about education choices in various Northern Norwegian newspapers, including Nordnorsk debatt (Nordlys), 2023. [172]

**Dagens Næringsliv** Interviewed in an article about health technology studies, 2018. [173]

**iTromsø** Interviewd in an article about Tromsø GamelLab, a course on game development. [174]

**Nordlys** Interviewd in an article about online security. [175]

**Kapital** Interviewd in an article about the NFC City project and the UICC and NFC programming course. [176]

**Teknisk Ukeblad** Interviewd in an article about the NFC City project and the UICC and NFC programming course . [177]

**Forskningsrådet** Interviewd in an article about the NFC City project and the UICC and NFC programming course . [178]

**Nordlys** Interviewd in an article about online security. [179]

**Norgesglasset** Interviewd on radio about smart phones and the consequences of smart phones. [180]

**VG** Interviewd in an article about the NFC City project and the UICC and NFC programming course. [181]

**Forskning.no** Interviewd in an article about the NFC City project and the UICC and NFC programming course. [182]

**NRK, Schrødingers katt** Participated in a TV program about Near Field Communication and the NFC City project. [183]

# Research work overview

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Anders Andersen

Last updated: January 27, 2024

*A more detailed Research Portfolio is not included in this overview.*

## Selected projects

**AI4Europe** The goal of the AI4Europe project is to develop an open EU platform for AI research. The AI4Europe project, in collaboration with AI4EU and other related projects, aims to introduce an unbiased, open and cooperative platform from and for the European research community for excellent studies of AI. The project received EU funding (Funding € 9 000 000, UiT part of funding € 265 000). *My role: Contributor to the application and managing UiT part of project.* [127]

**CIRFA** CIRFA, Centre for Integrated Remote Sensing and Forecasting for Arctic Operations, is a center for research-based innovation (SFI), a knowledge hub for Arctic monitoring technologies. *My role: Co-supervisor of PhD student 2019–2022.* [3, 194]

**SNUP** The SNUP project will construct a distributed system that is able to perform useful timely data analytic tasks while preserving users' privacy, in the context of smart nudge. Application submitted Norwegian Research Council IKTPLUSS program April 2019. *My role: Contributor to the application.* [128]

**RESTART** The overall objective of the RESTART trial is to examine whether a complex lifestyle intervention with supervised exercise, nutritional education and behavioral strategies can produce long-term improvements in CVD risk factors and functional capacity of high-risk older adults in a randomized controlled trial (RCT). Application submitted Norwegian Research Council BEDREHELSE program April 2019. *My role: Contributor to the application.* [129]

**Keenious** This is a student based commercialisation project providing an AI-based automatic network-based search tool for writing texts (for students, researchers and others). The tool use AI to automatic analyse the text while it is written and provides suggested references in a side-bar. The project received the student commercialisation grant STUD-ENT (Funding NOK 1 000 000) from the Norwegian Research Council in April 2018. *My role: Mentor for the project.* [124]

**Befolkningsundersøkelsen i Nord** The project (Population Surveys in the North) aim to improve the health of future generations by providing more, better and faster knowledge about health and living conditions of the population. Such knowledge benefits the population through knowledge-based health policies, the development of preventive measures, planned healthcare, and better patient care. The initiative addresses national and international health challenges with a particular focus on the northern regions. The project was granted funding as a strategic focus area at UiT The Arctic University of Norway in December 2017 (Funding approx NOK 100 000 000). *My role: Major contributor to application, WP leader, PhD supervisor.* [132, 111, 25]

**NUDGE** The focus of the project is green transportation, IoT and nudging. Nudging is a term from economics and political theory for influencing decisions and behaviour using suggestions, positive reinforcement and other non-coercive means, so as to achieve socially desirable outcomes. The project is about how to use IoT (Internet of Things) technology to influence people to use environmentally friendly modes of transport. Application submitted Norwegian Research Council IKTPLUSS program November 2016. *My role: Initiator, major contributor to application (all WPs, responsible for one WP).* [134, 18, 5, 4]

**2Gather** Effective leisure travel through gamification and digital services. Application submitted regional research fund (RFFNord) March 2017. *My role: Major contributor to application (responsible for one WP).* [133]

**KAYAK** The KAYAK vision is to establish an open, secure and scalable service platform for acquisition, analysis and sharing of IoT sensor data focusing on safety and situational awareness services for outdoor sport activities and tourism. Application submitted Norwegian Research Council IKTPLUSS program November 2016 and the Regional Research Fund North in October 2017. *My role: Major contributor to application (responsible for one WP).* [135, 130]

**SmartLab** This is a strategic initiative at the Department of Computer Science. The founders of the lab are the four research groups HPDS, BDPS, AGC and ODS with a total of eight tenured faculties behind it. The research focus in the project is on gathering the state of physical and cyber systems through cross group research on sensor systems, distributed systems, Big Data, security, parallel systems, and energy informatics. Application domains include health, medicine, biology, energy systems, climate, weather forecasting, and environment. The initiative was started in May 2016 and is still active ((Funding NOK 190 000). *My role: Major contributor to application.* [136]

**CAIM** The CAIM project introduces image context-awareness as a means of supporting image-based information retrieval in distributed and mobile environments. An image can be associated with multiple contexts and knowledge of these contexts can enhance the quality of the information retrieval process. In the project, context-awareness are used for identifying image semantics and relationships, and may thus contribute to closing the semantic gap between user information requests and the shortcomings of current content-based image retrieval techniques. *My role: Co-supervisor of one PhD student.* [8, 37, 28, 195]

**Pearl ETN** This project aims to establish an European Training Network on PErsonalised information Access and Retrieval (PEARL). Typical applications are for example personalized search and recommendation; publishing, broadcasting and advertising; e-learning; decision making. ITN application submitted Horizon 2020 in 2015. *My role: Major contributor to application (responsible for one WP).* [143, 140, 137]

**DeepCompose** The DeepCompose vision is to establish a programming standard for low-power HPC powering CPS (like OpenMP for parallel computing). It supports all key metrics required by CPS including performance, energy efficiency, security, dependability, time-criticality, and productivity. The new programming standard will facilitate the composition of new applications with different trade-offs in these metrics. This enables the productive development and optimization of customized applications with desired properties. Such a programming standard will form the foundation of an open-source CPS ecosystem which stakeholders across different market segments (e.g., ICT, transportation, smart communities and healthcare) can contribute to and benefit from. Application submitted Horizon 2020 (ICT-04-2015: Customised and low power computing, Research & Innovation Actions / New cross-layer programming approaches) April 2015. *My role: Major contributor to application (responsible for one WP).* [138]

**PriPIR** Create novel methods and algorithms that support personalization of services and content delivery to individuals, while protecting user privacy and enabling personalization on the user's terms. Application submitted IKTPLUSS in 2015. *My role: Initiator, major contributor to application (all WPs, responsible for one WP).* [139, 19]

**Snow SMSC** The focus of the project is Secure Multi-party Statistical Computations in health environments. Medical research using health data is difficult because of the legal, security and privacy issues involved. Snow SMSC wants to demonstrate that secure multi-party statistical processing of health data can be implemented solving these issues. Cooperation with Norwegian Center for Integrated Care and Telemedicine 2013–2014. Application submitted to Norwegian Research Council FRINATEK 2013 and 2014. *My role: Initiator and major contributor to application (and several WPs).* [141, 33, 36, 38, 40, 41]

**PHIRM** The PHIRM project is addressing the challenges of automatically detecting trustworthy health information on the Internet, and to personalize the retrieval of such information to the specific needs of the user. Application submitted FRINATEK 2014. *My role: Major contributor to application (written together with Prof. Randi Karlsen).* [142, 198]

**NOOP** NOOP is my experimental research middleware platform. NOOP provides adaptive support to distributed applications. NOOP components and functions specify their requirements in contracts that

the NOOP run-time has to fulfil. SNOOP is a variant of NOOP tailored for the Snow SMSC project. *My role: Major contributor to project.* [39, 33, 29]

**Telco lab** Establish a joint telco lab with Telenor at UiT. Funded by Telenor in 2013–2014 (Funding NOK 600 000). *My role: Initiator and major contributor to proposal.*

**BoostCoop** The overall goal of this project is to boost collaboration among individuals and teams, in all areas of activity, by providing to each one of them, constant updated context information regarding all the relevant others with no explicit intervention. Application submitted to 7th Framework Programme for Research, technological Development and Demonstration January 2013 (with the partners INESC ID, Portugal, and Lancaster University, UK). *My role: Major contributor to application (responsible one WP).* [144]

**CSI** The purpose of the project is to investigate how to achieve enhanced security to generic cloud storage services based on a combination of symmetric and asymmetric (public key) encryption, new approaches to authentication and digital signatures, and adaptive scalable cryptography. Funded by Eureka Eurostars project E!7816 (Size NOK 11 906 000 / Funding NOK 5 953 000). 2013–2015 (at Invenia AS with the partners Sirrix AG, Germany and Encap AS, Norway). *My role: Initiator, major contributor to application (all WPs) and project manager.* [145, 34]

**Mobinc** the main objectives of Mobinc is (i) to enhance the availability of information important to individuals, communities, and/or organizations, (ii) to provide support for enhanced value and usability of information through integration, sharing and context awareness, (iii) managing information of importance to individuals, communities, and/or organizations in a safe and secure manner, and (iv) combine the usage of NFC and biometrical data in such resource management. Application submitted Norwegian Research Council VERDIKT June 2011. *My role: Initiator, major contributor to application (all WPs, responsible one WP).* [146]

**NFC city** The project's objective is to promote the development and use of services for information exchange, access, ticketing and payment through new applications of mobile and near-field communication (NFC) technologies. Funded by the Norwegian Research Council VERDIKT project 201377/S10 (Size NOK 43 000 000 / Funding NOK 9 675 000), 2010-2014 (with 7 research and industrial partners). *My role: Major contributor to application (responsible one WP) and managing UiT part of project.* [150, 147, 6, 7, 8, 37, 42, 43, 45, 20, 31, 31, 32, 35, 30]

**Ensafer** Ensafer enables users to securely store documents on the Ensafer storage server and to share these documents with other users providing strong information privacy. 2006– (at Invenia AS and Invenia iLab AS). *My role: Major contributor to the project. Responsible for the research part of the project.* [21, 22]

**SatCent** SatCent, Tromsø Centre for Satellite based Earth Observation research, planned to conduct research to enhance understanding and knowledge of sensor physics, signal processing and retrieval algorithms for Earth observation. This should be complemented with applied research on systems architecture and system integration. The overall goal is to develop knowledge, systems, and services tailored to the monitoring and surveillance of Northern areas. Application submitted to the Norwegian Research Council for funding a Center for Research-based Innovation (SFI) April 2010 (with 12 industrial, research and user partners, and a large number of international associated partners). *My role: Major contributor to application (responsible for one WP).* [148]

**PIA** The project proposes a new approach to develop applications concerning personal information. It is based on the concept of a personal cloud that will provide easy and secure access to a variety of personal information from various devices and services. A basis for a personal cloud is a semantic-based adaptive semantic middleware platform that combines semantic web technologies, context and situation awareness, adaptive security mechanisms, and a high-level expressive programming model to support the development of applications concerning personal information. Application submitted to the Norwegian Research Council program VERDIKT November 2009 (with partners University of Lancaster, Telenor and Invenia AS). *My role: Initiator and major contributor to all WPs in application.* [151, 149, 46, 19, 36, 44, 47]

**UAV Middleware** The goal is to establish an adaptable infrastructure for Unmanned Aerial Vehicles (UAVs), including the middleware platform on the related communication protocols. Such an infrastructure must be able to adapt to different UAV tasks, different on-board equipment, and changing contexts (at NORUT), 2010–2012. *My role: PhD student supervisor.* [48]

**ROSE** Robust Sensor networks: The objective of this project is to bring forward new knowledge and technology in sensor based, robust control systems and in the integration of such systems. Application submitted to the Norwegian Research Council «StorIKT» PETROMAX November 2007 (with 13 research and industrial partners). *My role: Major contributor to application (responsible for one WP).* [152]

**IO High North** The primary objective of this project is to develop prototypes for a digital infrastructure and a semantic platform to implement Integrated Operations Generation 2 (IO G2) processes for “zero footprint” solutions. Application submitted to the Norwegian Research Council «Brukerstyrt innovasjon-sprosjekt» November 2006. *My role: Major contributor to application (responsible for one WP).* [153]

**Socialized.Net:** The project is a social Peer-to-Peer network infrastructure supporting personalized navigation. *My role: PhD student supervisor.* [200, 9]

**Penne** A distributed, secure, and highly resilient distributed storage systems based on modern cryptographic technology. Funded by the Norwegian Research Council program for «IKT sikkerhet og sårbarhet», project 158596/V30 (Size NOK 7 262 000 / Funding NOK 2 300 000), 2004–2008. *My role: Contributed to application and project manager 2006–2008.* [154, 201]

**QuA** The QuA project investigated how to develop complex real-time applications on a component architecture platform and learned through experimentation how dynamic QoS management and adaptation can be supported in general-purpose component architectures. Funded by the Norwegian Research Council IKT-2010 project 152950/431 (Funding NOK 8 000 000), 2002–2007. *My role: Initiator and contributor to application (and all WPs) and managing UiT part of project.* [155, 10, 50, 199]

**QoS Beans** Quality of Service Management in Arctic Beans. Funded by Simula Research Lab (one researcher, one year), 2002. *My role: Initiator and contributor to application (and all WPs) and managing UiT part of project.* [156]

**Arctic Beans** An adaptive application server and component model including adaptable support for enterprise software components. This includes a configurable and re-configurable component architecture, adaptable transaction support, and adaptable security protocols and services. Department of Computer Science, University of Tromsø. Funded by the Norwegian Research Council IKT-2010 project 146986/431 (Size NOK 15 236 000 / Funding NOK 7 148 000), 2001–2007. *My role: and major contributor to application (and all WPs) and acted as project manager.* [157, 11, 49, 51, 54, 52, 53, 201]

**6NET** 6NET was a three-year European project to demonstrate that continued growth of the Internet can be met using new IPv6 technology, Funded by the Information Society Technologies Programme of the European Commission, 2001–2005 (at Invenia Innovation AS, with 36 partners in the 6NET Consortium). *My role: Project participant.*

**OOPP** Reflective Middleware and Quality of Service Management, Dr. project, NORUT IT/University of Tromsø. Funded by the Norwegian Research Council and NORUT IT through the ELDORADO project 101048/420. Also supported by a NATO Science Fellowship (Norwegian Research Council project 116968/410) and the EPSRC Grant GR/L31609 through Lancaster University. 1995–2002. Supervisors Frank Eliassen and Gordon S. Blair. *My role: PhD student, and NORUT IT and UiT contact person for the project.* [116, 55, 57, 56, 116]

**V-QoS** A Specification Architecture for the Validation of Real-time and Stochastic Quality of Service, Distributed Multimedia Systems research group, Computing Department, Lancaster University, 1997–1999. *My role: Project participant.* [59, 12, 14]

**Open-ORB** An Open ORB Architecture, Distributed Multimedia Systems research group, Computing Department, Lancaster University, 1997–2001. *My role: PhD student, and NORUT IT and UiT contact person for the project.* [159, 13, 12]

**CORBAng** Next Generation CORBA, Lancaster University, UNIK, University of Tromsø and University of Oslo. Funded by the Norwegian Research Council and the British Council. 1998. *My role: Contributed to application and project participant.* [158, 61]

**SUMO II** Support for Multimedia in Operating Systems II, Distributed Multimedia Systems research group, Computing Department, Lancaster University, 1997. *My role: Project participant.* [60, 58]

**ATOM** A concurrent object oriented programming model, Distributed Multimedia Systems research group, Computing Department, Lancaster University, 1997. *My role: Project participant.* [62, 55]

**Internet Phone** Initial Internet phone project, Project done for UNINETT, NORUT IT, 1996. *My role: Project participant.*

**ENVISAT** The ENVISAT ASAR Wave Mode Cross Spectra Algorithm, Implementation of a program package, NORUT IT, 1996. *My role: Project participant (programmer).*

**StormCast** A distributed weather forecast application, UiT 1989–1995. *My role: Sivilingeniørstudent (Master student) in the project 1991.* [117]

## Expert reviewer

**European Commission, EU** Expert reviewer, monitoring review of ongoing research project: HORIZON-CL4-2021-DATA-01, Spring 2024.

**European Commission, EU** Expert reviewer, evaluation of the proposals submitted in response to the following call for proposals: HORIZON-CL4-2023-DATA-01, (Technologies for data management), 2023.

**European Commission, EU** Expert reviewer, evaluation of the proposals submitted in response to the following call for proposals: HORIZON-CL4-2022-DATA-01, (Technologies for data management), 2022.

**European Commission, EU** Expert reviewer, evaluation of the proposals submitted in response to the following call for proposals: HORIZON-CL4-2021-DATA-01, (Future European platforms for the Edge), 2022.

**European Commission, EU** Expert reviewer, final review of research project: H2020-ICT-2016-1, Spring 2020.

**European Commission, EU** Expert reviewer, evaluation of the proposals submitted in response to the following call for proposals: H2020-SU-ICT-2018-2020, (Cybersecurity), Topic: SU-ICT-02-2020, 2020.

**University of Oslo** Member of PhD committee, Francisco Velazques, University of Oslo, 2019.

**Karlstad University** Fakultetsopponent (member of PhD committee), Leonardo Iwaya, Karlstad University, 2019.

**UiT The Arctic University of Norway** Leader of PhD committee for Einar Holsbø 2018.

**European Commission, EU** Expert reviewer, monitoring review of ongoing research project: H2020-ICT-2016-1, Spring 2018.

**European Commission, EU** Expert reviewer, evaluation of the proposals submitted in response to the following call for proposals: H2020-ICT-2018, Big Data: Supporting the emergence of data markets and the data economy, Spring 2018.

**Natural Sciences and Engineering, Research Council of Canada** Expert reviewer for research project proposal to the Discovery Grants Program, January 2016.

**The Technical University at Munich (TUM)** External member of PhD committee, Victor del Razo 2016.



**UiT The Arctic University of Norway** Leader of PhD committee for Naoe Tatara 2014.

**Norwegian research council** Expert reviewer research project (RFF) 2010.

**University of Tromsø** Leader of PhD committee for Lars A Bongo 2008.

**University of Oslo** Member of PhD committee Ole-Christoffer Granmo 2004.

## Editor

**Proceedings of the Doctoral Symposium at the 9th ACM International Conference on Distributed Event-Based Systems (DEBS 2015)** Editor of the Proceedings for the The Doctoral Symposium at the 9th ACM International Conference on Distributed Event-Based Systems (DEBS 2015). [15]

**Proceedings of the 13th Workshop on Adaptive and Reflective Middleware (ARM 2014)** Editor of the Proceedings of the 13th Workshop on Adaptive and Reflective Middleware (ARM 2014) at the ACM/IFIP/USENIX Middleware conference 2014. [16]

**Proceedings of the Middleware Doctoral Symposium** Editor of the Proceedings for the Middleware Doctoral Symposium at the ACM/IFIP/USENIX Middleware conference 2013. [17]

## Journal reviewer and program committees

*This listing is not updated and complete.*

**The Doctoral Symposium at the 9th ACM International Conference on Distributed Event-Based Systems (DEBS 2015)** Co-chair / program committee for the The Doctoral Symposium at the 9th ACM International Conference on Distributed Event-Based Systems (DEBS 2015). [15]

**The 13th Workshop on Adaptive and Reflective Middleware (ARM 2014) at the ACM/IFIP/USENIX Middleware conference** Chair and leader of the programme committee for the 13th Workshop on Adaptive and Reflective Middleware (ARM 2014) at the ACM/IFIP/USENIX Middleware conference 2014. [16]

**Middleware Doctoral Symposium at the ACM/IFIP/USENIX Middleware conference** Chair and leader of the program committee for the Middleware Doctoral Symposium at the ACM/IFIP/USENIX Middleware conference 2013. [17]

**Elsevier Journal of Parallel and Distributed Computing** Regular reviewer of submitted papers in this journal since 2003 (18 papers reviewed in the period 2003–2013).

**The Adaptive and Reflective Middleware (ARM) workshop at the ACM/IFIP/USENIX Middleware conference** Member of program committee 2003–.

**Annual Conference on Privacy, Security and Trust (PST)** Member of program committee from 2014.

**International Conference on Service-Oriented Computing and Applications (IEEE SOCA)** Member of program committee every year since 2010.

**International Conference on Complex Open Distributed Systems (CODS'2007)** Member of program committee 2007.

# Publications

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Anders Andersen

Last updated: January 27, 2024

## Introduction

The publications below are grouped according to how they are categorized in CRISTin, the Research Information System for researchers and research institutions in Norway. The main publications are found in the categories *Journal publications*, *Editor*, *Book chapters*, *Patents* and *Peer-reviewed conference publications*.

## Journal publications

- [1] Randi Karlsen and Anders Andersen. How to trigger personalized and context-aware nudges. I Richard Chbeir, Sergio Ilarri, Yannis Manolopoulos, Peter Z. Revesz, Jorge Bernardino and Carson K. Leung, editors, *Database Engineered Applications, 28th International Symposium, IDEAS 2024*, volume 15511 of *Lecture Notes in Computer Science*, Bayonne, France, August 2024. Springer-Verlag. ISBN 978-3-031-83471-4. ISSN 0302-9743.
- [2] Seshathiri Dhanasekaran, Anders Andersen, Randi Karlsen and André Henriksen Anne Håkansson. Data collection and analysis methods for smart nudging to promote physical activity: Protocol for a mixed methods study. *Studies in Health Technology and Informatics*, 302:876–880, 2023. ISSN 0926-9630.
- [3] Salman Khaleghian, Habib Ullah, Einar Broch Johnsen, Anders Andersen and Andrea Marinoni. Afsd: Adaptive feature space distillation for distributed deep learning. *IEEE Access*, 10:84569–84578, August 2022.
- [4] Randi Karlsen and Anders Andersen. The impossible, the unlikely, and the probable nudges: A classification for the design of your next nudge. *MDPI Technologies*, 10(6), October 2022.
- [5] Randi Karlsen and Anders Andersen. Recommendations with a nudge. *MDPI Technologies*, 7(2):45:1–45:16, June 2019. (Special Issue Next Generation of Recommender Systems). ISSN 2227-7080.
- [6] Bente Evjemo, Sigmund Akselsen, Dag Slette-meås, Arne Munch-Ellingsen, Anders Andersen and Randi Karlsen. I expect smart services! – user feedback on NFC based services addressing everyday routines. I Raffaele Giaffreda, Dagmar Caganova, Yong Li, Roberto Riggio and Agnes Voisard, editors, *Internet of Things. IoT Infrastructures (Part II)*, volume 151 of *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, page 118–124. Springer-Verlag, 2015. ISBN 978-3-319-19743-2. ISSN 1867-8211.
- [7] Anders Andersen, Randi Karlsen and Arne Munch-Ellingsen. NFC provided user friendliness for technologically advanced services. I Sakae Yamamoto, editor, *15th International Conference on Human-Computer Interaction (HCI International 2013)*, volume 8017 of *Lecture Notes in Computer Science*, page 337–346, Las Vegas, USA, July 2013. Springer-Verlag. ISSN 0302-9743.
- [8] Randi Karlsen and Anders Andersen. NFC-based image annotation. I Maristella Matera and Gustavo Rossi, editors, *The International Workshop on the Future Internet of Things and Cloud (FiCloud 2013)*, in conjunction with *The 10th International Conference on Mobile Web Information Systems*

(MobiWIS 2013), volume 183 of *Communications in Computer and Information Science*, page 72–85, Paphos, Cyprus, August 2013. Springer-Verlag. ISSN 1865-0929.

- [9] Njål T. Borch, Anders Andersen and Lars Kristian Vognild. Social topology analyzed. I *International Conference on Cooperative Information Systems, in On the Move to Meaningful Internet Systems 2007: CoopIS, DOA, ODBASE, GADA, and IS*, volume 4803 of *Lecture Notes in Computer Science*, page 226–237, Vilamoura, Portugal, November 2007. Springer-Verlag. ISBN 978-3-540-76846-3. ISSN 0302-9743.
- [10] Arne Munch-Ellingsen, Dan Peder Eriksen and Anders Andersen. Argos, an extensible personal application server. I *Middleware 2007*, volume 4834 of *Lecture Notes in Computer Science*, page 21–40, November 2007. ISBN 978-3-540-76777-0. ISSN 0302-9743.
- [11] Anders Andersen, Gordon S. Blair, Vera Goebel, Randi Karlsen, Tage Stabell-Kulø and Weihai Yu. Arctic Beans: Configurable and reconfigurable enterprise component architectures. *IEEE Distributed Systems Online*, 2(7), November 2001.
- [12] Gordon S. Blair, Lynne Blair, Anders Andersen and Trevor Jones. Formal support for dynamic QoS management in the development of open component-based distributed systems. *IEE Proceedings – Software*, 148(3):83–92, June 2001. Special issue on generative and component-based software engineering. ISSN 1462-5970.
- [13] Gordon S. Blair, Geoff Coulson, Anders Andersen, Lynne Blair, Michael Clarke, Fabio Costa, Hector Duran-Limon, Tom Fitzpatrick, Lee Johnston, Rui Moreira, Nikos Parlavantzas and Katia B. Saikoski. The design and implementation of Open ORB 2. *IEEE Distributed Systems Online*, 2(6), 2001.
- [14] Gordon S. Blair, Anders Andersen, Lynne Blair, Geoff Coulson and David Sánchez Gancedo. Supporting dynamic QoS management functions in a reflective middleware platform. *IEE Proceedings – Software*, 147(1):13–21, February 2000. ISSN 1462-5970.

## Editor

- [15] Maarten van Steen and Anders Andersen, editors. *Proceedings of the Doctoral Symposium at the 9th ACM International Conference on Distributed EventDBased Systems (DEBS 2015)*, Oslo, Norway, June 2015.
- [16] Fábio M. Costa and Anders Andersen, editors. *Proceedings of the 13th Workshop on Adaptive and Reflective Middleware (ARM 2014) at the 15th ACM/IFIP/USENIX International Middleware Conference*. acm, December 2014. ISBN 978-1-4503-3232-3.
- [17] Anders Andersen and Chang Xu, editors. *Proceedings of the 2013 Middleware Doctoral Symposium (MDS’13) at the 14th ACM/IFIP/USENIX International Middleware Conference*, Beijing, China, December 2013. ACM. ISBN 978-1-4503-2548-6.

## Book chapters

- [18] Anders Andersen, Randi Karlsen and Weihai Yu. Green transportation choices with IoT and smart nudging. I Muthucumaru Maheswaran and Elarbi Badidi, editors, *Handbook of Smart Cities: Software Services and Cyber Infrastructure*, page 329–352. Springer-Verlag, 2018. ISBN 978-3-319-97270-1.

- [19] Anders Andersen and Randi Karlsen. Privacy preserving personalization in complex ecosystems. I Claudia Linnhoff-Popien, Ralf Schneider and Michael Zaddach, editors, *Digital Marketplaces Unleashed*, page 247–261. Springer-Verlag, 2017. ISBN 978-3-662-49274-1 / 978-3-662-49275-8.
- [20] Arne Munch-Ellingsen, Anders Andersen, Sigmund Akselsen and Randi Karlsen. Customer managed security domain on mobile network operators’ SIM cards: Opportunities to enable new business models. I *Marktplätze im Umbruch: Digitale Strategien für Services im Mobilen Internet*. Springer-Verlag, 2015. ISBN 978-3-662-43781-0.

## Patents

- [21] Trond Andersen, Anders Andersen, Anders Mathisen and Terje Wold. Method for secure storing of a data file via a computer communication network. United States Patent US 9,582,678 B2, Invenia AS, February 2017.
- [22] Anders Andersen, Øyvind Pedersen and Terje Wold. Method for secure storing and sharing of a data file via a computer communication network and open cloud services. United States Patent US 9,224,003 B2, Invenia AS, December 2015.

## Peer-reviewed conference publications

- [23] Ingar M. Arntzen, Njål Trygve Borch and Anders Andersen. Control-driven media: A unifying model for consistent, cross-platform multimedia experiences. *International Journal of Advanced Computer Science and Applications*, 15(9):31–42, 2024.
- [24] Ingar M. Arntzen, Njål Trygve Borch and Anders Andersen. State trajectory: A unifying approach to interactivity with real-time sharing and playback support. I K. Arai, editor, *Proceedings of the Future Technologies Conference (FTC 2023)*, Volume 2, volume 814 of *Lecture Notes in Networks and Systems*. Springer, 2023. ISBN 978-3-031-47450-7.
- [25] Seshathiri Dhanasekaran, Anders Andersen, Randi Karlsen, Anne Håkansson and André Henriksen. Data collection and smart nudging to promote physical activity and a healthy lifestyle using wearable devices. I *Proceedings of the 18th Scandinavian Conference on Health Informatics*. Linköping Electronic Conference Proceedings, 2022. ISBN 978-91-7929-344-4. ISSN 1650-3686.
- [26] Anders Andersen, Tor Berre, Pål Ellingsen, Laurence Habib, Moutaz Haddara, Erik Hjelmås, Mette Mo Jakobsen, Audun Jøsang, Tom-Heine Nätt, Jingyue Li, Arne Roar Nygård, Sondre Rønjom, Hans Georg Schaathun, Arild Steen and Tor-Fredrik Torgersen. Informasjonssikkerhet i høyere utdanning. *Nordic Journal of STEM Education*, 3(1):267–271, March 2019. (MNT-konferansen 2019). ISSN 2535-4574.
- [27] Anders Andersen, Stian Normann Anfinnsen and Luca Frediani. Fremragende læring med beregningsorientert programmering. *Nordic Journal of STEM Education*, 3(1):70–74, March 2019. (MNT-konferansen 2019). ISSN 2535-4574.
- [28] Randi Karlsen, Najeeb Elahi and Anders Andersen. Personalized recommendation of socially relevant images. I *WIMS’18: 8th International Conference on Web Intelligence, Mining and Semantics*, ACM International Conference Proceeding Series, Novi Sad, Serbia, June 2018. ACM. ISBN 978-1-4503-5489-9.

- [29] Anders Andersen and Merete Saus. Privacy preserving distributed computation of community health research data. I Elhadi Shakhshuki, editor, *The 4th International Workshop on Privacy and Security in Healthcare (PSCare 2017)*, volume 113 of *Procedia Computer Science*, page 633–640. Elsevier, 2017. ISSN 1877-0509.
- [30] Anders Andersen and Randi Karlsen. User profiling through NFC interactions: Mining NFC-based user information from mobile devices and back-end systems. I *MobiWac'16: Proceedings of the 14th ACM International Symposium on Mobility Management and Wireless Access*. ACM, 2016.
- [31] Arne Munch-Ellingsen, Anders Andersen, Sigmund Akselsen, Kristian Elsebø, Robert Molund Pettersen, Erlend Helland Graff and Simon Andreas Nistad. Manage your own security domain on your smartphone. I *Proceedings of the 2015 First Conference on Mobile and Secure Services (MOBISecSERV)*. IEEE, 2015. ISBN 978-1-4799-7428-3.
- [32] Arne Munch-Ellingsen, Richard Karlsen, Anders Andersen and Sigmund Akselsen. Two-factor authentication for android host card emulated contactless cards. I *Proceedings of the 2015 First Conference on Mobile and Secure Services (MOBISecSERV)*. IEEE, 2015. ISBN 978-1-4799-7428-3.
- [33] Anders Andersen. SNOOP: Privacy preserving middleware for secure multi-party computations. I Fabio M. Costa and Anders Andersen, editors, *Proceedings of the 13th Workshop on Adaptive and Reflective Middleware (ARM 2014)*, Bordeaux, France, December 2014. ACM. ISBN 978-1-4503-3232-3.
- [34] Anders Andersen, Trygve Hardersen and Norbert Schirmer. Privacy for cloud storage. I Helmut Reimer, Norbert Pohlmann and Wolfgang Schneider, editors, *ISSE 2014 Securing Electronic Business Processes; Highlights of the Information Security Solutions Europe 2014 Conference*, Brussels, Belgium, October 2014. Springer-Verlag. ISBN 978-3-658-06707-6.
- [35] Anders Andersen and Arne Munch-Ellingsen. Mobile device security: The role of NFC, UICC and secure elements. I *Norsk Informasjonssikkerhetskonferanse (NISK 2014)*, Fredrikstad, November 2014. ISSN 1893-6563.
- [36] Anders Andersen, Kassaye Yitbarek Yigzaw and Randi Karlsen. Privacy preserving health data processing. I *Healthcom'14, 16th International Conference on E-health Networking, Application & Services*, Natal, Brazil, October 2014. IEEE.
- [37] Randi Karlsen and Anders Andersen. Tools for image annotation: Using context-awareness, NFC and image clustering. I *Norsk Informatikkonferanse 2014 (NIK 2014)*, Fredrikstad, 2014. ISSN 1892-0713.
- [38] Anders Andersen. An implementation of secure multi-party computations to preserve privacy when processing EMR data. I *The International Conference on Privacy, Security and Trust (PST 2013)*, 2013.
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