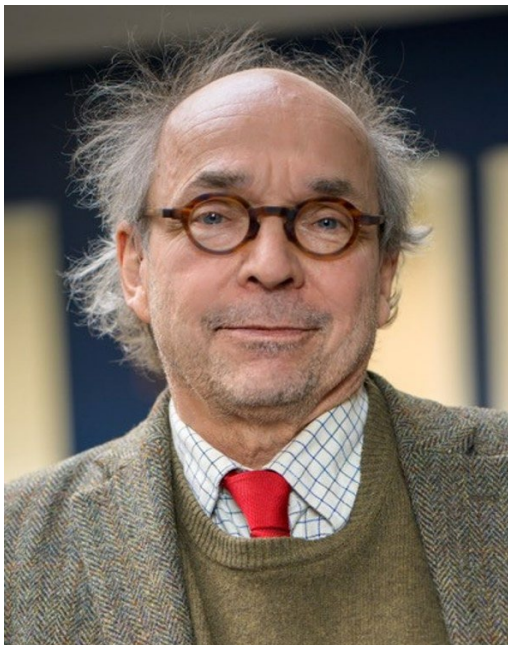




Curriculum Vitae

(updated November 2025)

Thomas Porathe

Professor Emeritus, Interaction design

Retired April 2024 from the Department of Product Design, Norwegian University of Science and Technology (NTNU), Kolbjørn Hejes vei 2b, NO-7491 Trondheim, Norway

Personal information

Name: Thomas Porathe

Date of birth: 10 March 1954

Mobile: +46 70 668 1819

Email: thomas.porathe@ntnu.no

Address: Jacobigatan 14, Mariefred, Sweden

Academic degrees

2001-2006 Ph.D. Innovation and Design (Information Design), Dep. of Innovation, Design and Product Development, Mälardalen University, Sweden

1977-1980 B.A. in acting, National Drama School (Statens scenskola) at Göteborg University, Sweden

Professional experience

Present positions

- 2024- Professor emeritus of Interaction Design at the Department of Design at NTNU, Norwegian University of Science and Technology in Trondheim, Norway.

Earlier positions

- 2022-2025 Professor in Maritime Human Factors (20%) at Western Norway University of Applied Science, Dep. of Maritime Studies, Haugesund, Norway.
- 2014-2024 Full professor of Interaction Design at the Department of Product Design at Norwegian University of Science and Technology in Trondheim, Norway.
- 2013-2014 Associate professor (docent) in Human Factors at the Department of Shipping and Marine Technology at Chalmers University of Technology in Göteborg, Sweden
- 2011-2013 Assistant professor (universitetslektor) in Human Factors at the department of Shipping and Marine Technology at Chalmers University of Technology in Göteborg, Sweden
- 2010-2011 Researcher/guest lecturer in Human Factors at the department of Shipping and Marine Technology at Chalmers University of Technology in Göteborg (80 %).

- 2010 - 2011 Assistant professor (universitetslektor) in Information Design at the school of Innovation, Design and engineering (IDT), at Mälardalens University (MDH) in Eskilstuna. (20 %)
- 2008 - 2010 Researcher/guest lecturer in Human Factors at the department of Shipping and Marine Technology at Chalmers University of technology in Göteborg (20 %).
- 2006 - 2010 Assistant professor (universitetslektor) in Information Design at the school of Innovation, Design and engineering (IDT), at Mälardalens University in Eskilstuna. (100 %)
- 2001 - 2006 Lecturer (universitetsadjunkt) in Information Design at the department of Innovation, Design and Product development (IDT) at Mälardalen University.
- 1995 - 2001 Entrepreneur (egen företagare): Sagopråmen Science Media, multimedia, web production and illustrations.
- 1984 -1995 Freelance actor. E.g. Uppsala Stadsteater, Unga Riks, Västernorrlands Regionteater, Sveriges Radio and SVT, directed radio drama and teacher in drama at the Operahögskolan in Stockholm and on SVT:s internal education program for drama directors and camera crews.
- 1983-84 Actor, director and artistic director for Malmö Metropolitan Theatre's *Young Theatre*
- 1980-83 Actor at Malmö Metropolitan Theatre.

Language skills: Swedish (native), English (fluent), German (basic), French (basic)

Teaching and research interests

Information and interaction design, human factors. Main research interest usability and human-centred map design. Has since 2001 been working with research on and development of a new type of egocentric view 3D nautical charts targeting cognitive off-loading. Particularly interested in methods of user-centred design and usability.

Entrepreneurial Achievements

- 2001-2007 Founder and owner of 3D Islands AB, for research and development of 3D nautical charts.
- 2004 Patent on Depth database structure
- 2005 Patent of Intelligent leading lines in nautical charts
- 1996-2001 Owner of multimedia company "Sagopråmen" (children's CD-ROM productions)

Education

Exams

- 2006: Ph.D. (teknologie doktorsexamen) from Mälardalen University in Innovation and Design (Information Design). Confirmed (promoverad) in 2007 in Västerås.
- 1980: B. A. in acting from Scenskolan at University of Gothenburg (presently Academy of Music and Drama).

Scientific education:

2009 University of Uppsala: Brain and behaviour, 7,5 hp.

2002-03 Mälardalen University:

Information design, overview, 5 p.
Innovation and design, 10 p.
Research methods, 5 p.
Information design, esthetics and semiotics, 5 p.
Information design, user testing and design, 5 p.
Statistics for Ph.D. students, 5 p.

2001-02 University of Linköping:

Geographical information systems, 5 p.
Geographical information systems 2, 5 p.
GIS/Econometrics, 5 cp.
Advanced Course in IT, GIS and Mobility, 5p.

1995-96 KTH Royal Institute of Technology, Stockholm

Multimedia development, 10 p.
Electronic publication, 5 p.

1993 University of Uppsala

Nature and Man, 5 p.
1992-94 Studies of the Technical Physics program at the University of Uppsala
Computer user, 4.6 p.
Numerical analysis1, 4.6 p.
Basic algebra 3.4 p.
Technical orientation 1, 2.5 p.
Mechanics 8.1 p.
Electricity 4.8 p.
Electronics 4.2 p.
Wave motion5.2 p.
Business economics 2.6 p.
Technical orientation 2, 3.5 p.

1980-90 Courses at the Dramatic Institute in Stockholm:: Radio theater direction,
Theater as picture, TV drama directing, three camera technique

1977-80 Drama school at University of Gothenburg 120 p.

1974-75 Painting at École National Superiure des Beux-Arts, Paris

1974 Science of literature AB3, at University of Gothenburg, 15 p.

Pedagogic education:

Course design and university pedagogic, university pedagogical course 3, MDH, 2008

The university teacher, university pedagogical course 1, MDH, 2007

Supervision for Ph.D. students, MDH and University of Karlstad, 2007

The student and learning, university pedagogical course 2, MDH, 2006

Pedagogisk meritportfölj course, MDH, 2006

Teaching

2019

- NTNU: Information Visualisation, 7.5 hp.
- NTNU: Human Centred Design, 7.5 hp.

2018

- NTNU: Information Visualisation, 7.5 hp.
- NTNU: Human Centred Design, 7.5 hp.

2017

- NTNU: Information Visualisation, 7.5 hp.
- NTNU: Human Centred Design, 7.5 hp.

2016

- NTNU: Information Visualisation, 7.5 hp.
- NTNU: Human Centred Design, 7.5 hp.

2015

- NTNU: Human Centred Design, 7.5 hp.

2013

- Chalmers: Master program in Maritime logistics: Research methods, 7.5 p.
- Chalmers/GU Interaction design master program: Information Visualization 7.5 p.

2012

- Chalmers, Nordic Master: Research Methods, 7,5 hp.
- Chalmers/GU Interaction design master program: Information Visualization 7.5 p.
- Chalmers, Nordic Master, Master Thesis course, 7,5 hp.

2011

- Dalian Maritime University, China: Sino-European Usability Center: Quantitative research methods and experimental design.
- Chalmers, Nordic Master, Master Thesis course, 7,5 hp.

2010

- Chalmers: Human Factors, (SJO236) , Master Level. English.
- MDH: Cognitive processes, (KIT104) Under graduate level, core course in Information Design.

2009

- MDH: Cognitive processes, (KIT104) Under graduate level, core course in Information Design,, 2009-03-23 - 2009-04-24
- Chalmers: Human Factors, (SJO235) , Master Level. English, 2009-10-01 - 2009-11-17
- MDH: User Experience - kvalitativ och kvantitativ utprovning, (ITE203) , Under graduate level, core course in Interaction Design, 2009-09-02 - 2009-10-28

2008

- MDH: VR Visualization, (KIT186) Under graduate level,, 2008-08-26 - 2008-10-24
- Istanbul: Interaktionsdesign, kreativt tänkande för traditionellt K, (ki1820) Under graduate level, international course in English, 2008-06-09 - 2008-07-11 (Utrecht

School of the Arts, Holland, Joanneum FHS, Graz, Austria & Gildiz Technical University, Istanbul, Turkey)

- MDH: Kognitiva processer, (KIT104) Under graduate level, core course in Information Design, 2008-03-31 - 2008-05-02
- MDH: Interaction Design, (KIT906) Master Level., 2008-03-31 - 2008-05-02
- MDH: VR Visualization, (KIT176) Distance course, Under graduate level, 2008-01-21 - 2008-06-06

2007

- MDH: Instruction Design, (KIT903) Master Level. 2007-12-03 - 2008-01-18
- MDH: Informationsdesign i teori och praktik B 1, (KIT003) Under graduate level, core course in Information Design, 2007-10-29 - 2007-11-30
- Istanbul: Interaktionsdesign, kreativt tänkande för traditionellt K, (ki1820) Under graduate level, international course in English. 2007-06-11 to 2007-07-12. (Utrecht School of the Arts, Holland, Joanneum FHS, Graz, Austria & Gildiz Technical University, Istanbul, Turkey)
- MDH: Informationsdesign i teori och praktik B 2, (ki0040) Under graduate level, core course in Information Design, 2007-01-22 - 2007-02-23
- MDH: VR Visualization, (ki1760/kn3130) Distance course, English, Under graduate level, 2007-01-22 - 2007-06-08

2006

- MDH: 3D-modellering, grundkurs, (ki1840) Distance course, Under graduate level, 2006-08-21 - 2007-01-19
- MDH: 3D Modeling, Basic Course, (ki1850) Distance course, English, Under graduate level, 2006-08-21 - 2007-01-19
- MDH: Informationsdesign i teori och praktik B 1, (ki0030) Under graduate level, core course in Information Design, 2006-10-30 - 2006-11-30
- MDH: VR Visualization, (ki1760/kn3130) Distance course, English, Under graduate level, 2006-01-23 - 2006-06-09
- MDH: Informationsdesign i teori och praktik B 1, (ki0030) Under graduate level, core course in Information Design, 2006-04-04 - 2006-05-05

2005

- MDH: 3D-modellering, grundkurs, (ki1730) Distance course, Under graduate level, 2005-08-22 - 2006-01-20

- MDH: Informationsdesign i teori och praktik B 1, (ki0030) Under graduate level, core course in Information Design, 2005-10-31 - 2005-12-02
- MDH: Interaktiv Berättarteknik, (ki1780) Under graduate level, 050404 - 050610
- MDH: VR-visualisering, (ki1760/kn3130) Under graduate level, 050228-050408

2004

- TDK: Informationsdesign, metod och utprovning, (ki7500) Distance cours, Master level, 040904 - 041113 (Linköping University, Malmö högskola)
- MDH: Interaktiv Berättarteknik, (ki1780) Under graduate level 040329 - 040604
- MDH: VR-visualisering 1, (ki1760) Under graduate level 040119 - 040220
- MDH: VR-visualisering 2, (kn3130) Under graduate level 040119 - 040326

2003

- MDH: 3D-animering (Animation 2), (ki3170) , Under graduate level 031208 - 040116
- TDK: Informationsdesign, metod och utprovning, (ki7500) Distance course, Master level, 030825 - 031031 (Linköping University, Malmö högskola)
- MDH: 3D-modellering, lågpolygonteknik för speldesign, (ki1790) Under graduate level 030825 - 031031
- MDH: 3D Modeling, Basic Skills, (ki1830) English, Distance Learning, Under graduate level, Aug. 25th 2003 to Jan. 16th 2004
- MDH: 3D-modellering, grundkurs, (ki1730) Under graduate levelt 030902 - 040116
- MDH: 3D-modellering, grundkurs, (ki1730b) Distance course, Under graduate level, 030825 - 040116
- MDH: VR-visualisering s03, (ki1760) Under graduate level 030610 - 030822
- MDH: 3D-modellering_vt03, (ki3150) Under graduate level 030331 - 030430
- MDH: 3D-animation_vt03, (ki3170) Under graduate level 030120 - 030221

2002

- MDH: VR-visualisering_ht02, (ki1760) Under graduate level 021209 - 030117
- MDH: Multimediaprogrammering_ht02, Under graduate level, part of the course Multimedia 1 (ki1750) 021105 - 021206
- MDH: 3D-modellering_vt02, (ki3150) Under graduate level020429 - 020604

2001

- MDH: Multimediaprogrammering_ht01, Under graduate level, part of the course Multimedia 1 (KI1210) 011203 - 020215
- MDH: 3D-animation_ht01, Under graduate level, part of the course Infobilder C (KI1200) 011015 - 011026
- MDH: Multimedial presentationsteknik_ht01, (KI1070) Under graduate level, 010821 - 010918
- MDH: Webbproduktion_ht01, (KI1530) Under graduate level, 010820 - 010921

1999 och 2000

- Grafiska Institutet, Stockholm: Flash-kurs, Dreamweaverkurs
- Grafikens Hus, Mariefred: Dreamweaver-kurs, Photoshop-kurs

In 2009 nominated as one of three teachers by the Mälardalen student council for the award *Teacher of the year* (however I did not get it).

In 2012 I won the prize of "Teacher of the year" (Årets Pedagog), handed out by the student union at the IT section of Chalmers student union for my teaching in the course Information Visualization.

Courses developed:

2014: Information Visualisation, 7.5 hp (NTNU)

Human Centred Design, 7.5 hp. (NTNU)

2013 Research methods: master level, 7.5 hp (Chalmers)

2012: Information Visualization, master's level, 7,5 hp. (Chalmers/GU)

2011: Quantitative research methods and experimental design, master's level, equivalent to 7,5 hp. Dalian Maritime University, China

2009: User Experience - user testing with qualitative and quantitative methods, 7,5 hp.

2009: Maritime Human Factors, master level, 7,5 hp. (Chalmers)

2008: Cognitive Processes (basic level), 7,5 hp

2008: Interaktion Design (advanced level), 7,5 hp.

2007 Instruktion Design (advanced level), 7,5 hp

2006: Information Design in theory and practice B2 (usability testing methods, advanced level), 5 p.

2006: Information Design in theory and practice B1 (cognitive psychology), medium level, 5 p.

2000: Interaktiv Narration, basic level, 5 p.

3D Modelling, low polygon modeling for game design, basic level, 5 p.

2000: VR Visualization, advanced level, 5 p.

2000: 3D Modeling, Basic Skills, medium level, 5 p .

Teaching achievements

2012 Elected Teacher of the year award by the student union at Applied IT department, Chalmers University of Technology

2010 Nominated (1 of 3) by the student union to Teacher of the year award at Mälardalen University

Research projects

2022-2025 OCEAN (Operator-Centered Enhancement of Awareness in Navigation), EU Horizon Europe project.

2019-2023 LASH FIRE (Legislative Assessment for Safety Hazards of Fire and Innovations in Ro-ro ship Environment), EU H2020 project.

2019-2021 EuroStar ConSense (Sensing and Predicting Concrete Maturity) EU EuroStar project.

2019-2023 LOAS (Land-based Monitoring of Autonomous Ships), NRC project

2019-2022 IMAT (Integrated Maritime Autonomous Transport Systems) NRC project

2018-2021 AutoFerry, NTNU strategic funding project

2018-2021 SESAME, Solution 2 (Secure, Efficient and Safe maritime traffic Management in the Straits of Malacca and Singapore), NRC MAROFF project.

2018-2021 HUMANE, (Human Maritime Autonomy Enable) Human Factors in autonomous shipping, NRC knowledge project.

2018-2020 M-AR (Maritime Augmented Reality), NRC innovation project.

2017-2020 SMACS (Sensemaking in safety-critical situations), NRC, one PhD candidate

2017-2020 SAREPTA (Safety, autonomy, remote control and operations of transport systems), NRC, one PhD candidate

2015-2018 SikkerKurs, Innovation project, Norwegian Coastal Administration

2015-2017 REMOTE (Utvikling av kontrollrom-konsept for fjernoperasjon av oppdrettsanlegg), Utviklingsfond Nord- project

2015-2018 EfficienSea 2, EU Horizon 2020 project.

2015-2018 ONSITE (Design Driven Field Studies for Safer Demanding Marine Operations) Norwegian Research Council.

2015-2017 REMOTE (Utvikling av kontrollrom-konsept for fjernoperasjon av oppdrettsanlegg, Development of concepts for control rooms for fish farms) Norwegian Research Council.

2011-2015 ACCSEAS (Accessibility for shipping efficiency advantages and sustainability). E-Navigation project. EU InterReg. North Sea project.
<http://www.accseas.eu/>

2011-2015 MUNIN (Maritime unmanned navigation through intelligence in networks). e-Navigation project. EU 7th framework. <http://www.unmanned-ship.org/munin/>

2011-2015 MONALISA 2 (Motorways and electronic navigation by intelligence at sea). e-Navigation project. EU 7th framework.
<http://www.sjofartsverket.se/en/MonaLisa/MONALISA-20/>

2012-2014 SITUMAR. Kongsberg Maritime. Information and interaction expert in development of next generation bridge equipment at this private company.

2009-2013 MONALISA (Motorways and electronic navigation by intelligence at sea). e-Navigation project. EU 7th framework. <http://monalisaproject.eu/>

2013 MICE (MONALISA Ice) e-Navigation project. Swedish Maritime Administration.

2009-2012 EfficenSea (Efficient safe and sustainable traffic at sea) e-Navigation project. EU InterReg Baltic Sea project. <http://efficiensea.eu/>

2011-2012 SAM Electronics NACOS Platinum project. Information and interaction expert in development of next generation bridge equipment at this private company.
<http://www.sam-electronics.de/dateien/navigation/navigation.html>

2009-2012 BLAST (Bringing land and sea together) e-Navigation project. EU InterReg. North Sea project. <http://www.blast-project.eu/>

2009-2011 IMPACT (Integrated Maritime Progressive Assessment and Calibration Tool). Maritime risk assessment project. VINNOVA, EU, MARTEC.
<http://wmu.se/project/impact>

2009-2011 HORIZON Fatigue project. EU 7th framework.
<http://www.warsashacademy.co.uk/about/our-schools/maritime-research-centre/horizon-project/horizon-project.aspx>

2009-2011 SAFEWAY2SCHOOL (Integrated system for safe transportation of children to school). EU 7th framework. <http://www.safeway2school-eu.org/>

Committees

2018-2020	Member of the IALA ARM committee
2013-2017	Vice chair of IALA's e-Navigation committee's Testbeds working group.
2011-2013	IALA's e-Navigation committee, Portrayal and testbeds working groups
2013	IMO NAV 59, IALA representative

Memberships

2015-2024 Associated Fellow of Nautical Institute (AFNI)
2015-2024 Member of Royal Institute of Navigation (RIN)

2009-2014 Board member of Swedish Radio Navigation Board
(Radionavieringsnämnden)
2009- Member of Nautical Institute (MNI)

Post doc

2011 Guest Professor, Dalian Maritime University, Dalian, China. Experiment with mental rotations and map reading on Chinese mariners. Teaching Research Methods master level course at Sino-European Usability Center, DMU.

Publications

Book

Johnsen, S. O., Porathe, T. (2021). *Sensemaking in Safety Critical and Complex Situations: Human Factors and Design*. CRC Press.

Porathe, T. (2006) *3-D Nautical Chart and Safe Navigation*. Mälardalen University Dissertations No. 27. Västerås.

Book Chapters

Porathe, T. (2023). Human-Centred Autonomous Shipping: Overview of recent research. In M. Lützhöft & J. Earthy (Eds.) *Human-Centred Autonomous Shipping*, CRC Press

Porathe, Thomas. (2021) Autonomous ships: A research strategy for Human Factors research in autonomous shipping. In Stantaon, S. (Ed.) *Advances in Human Aspects of Transportation: Proceedings of the AHFE 2021 Virtual Conference on Human Aspects of Transportation*, July 25–29, 2021, USA. Lecture Notes in Networks and Systems 270, Springer, Cham, Switzerland.

Danielsen, B.-E., Lützhöft, M. & Porathe, T. (2021). Still unresolved after all these years: Human-technology interaction in the maritime domain. In N. Stanton (Ed.) *Advances in Human Aspects of Transportation: Proceedings of the AHFE 2021 Virtual Conference on Human Aspects of Transportation*, July 25–29, 2021, USA (s. 463-470). Lecture Notes in Networks and Systems 270, Springer, Cham, Switzerland.

Porathe, Thomas. (2021) Sensemaking in practical design: A navigation app for fast leisure boats. In S.O. Johnsen & T. Porathe (Eds.) *Sensemaking in Safety Critical and Complex Situations: Human Factors and Design*. CRC Press

Porathe, T., Rødseth, Ø., Fjøltoft, K. Hoem, Å. & Johnsen, S. (2018). At least as safe as manned shipping? Autonomous shipping, safety and “human error”. In *Safety and Reliability – Safe Societies in a Changing World*. Proceedings of ESREL 2018, June 17-21, 2018, Trondheim, Norway. Taylor & Francis 2018, ISBN 9781351174657. p. 417- 425

Porathe, T. (2017). Ship navigation: Information integration in the maritime domain. In A. Black, P. Luna, O. Lund, & S. Walker (Eds.) *Information design: research and practice*. London: Taylor & Francis.

Porathe, T., Brodje, A., Weber, R., Camre, D., & Borup, O. (2015). Supporting Situation Awareness on the bridge: testing route exchange in a practical e-Navigation study. In A. Weintrit, & T. Neumann (Eds.) *Information, Communication and Environment: Marine Navigation and Safety of Sea Transportation*, London: CRC Press, 85-92.

Brødje, A.; Weber, R; Camre, D.; Borup, O.; & Porathe, T. (2015). Supporting Voice Communication Between Navigator and VTS by Visual Solutions-Exploring the Use of the "Route Suggestion" Functionality within VTS. In *Information, Communication and Environment: Marine Navigation and Safety of Sea Transportation*. CRC Press, 267-274

Porathe, T. (2015). Human Error and e-Navigation: Developing the Nautical Chart as Resilient Decision Support. In *Human Interface and the Management of Information: Information and Knowledge in Context (Part II)*. Springer, 129-139.

Porathe, T., Eklund, P., & Göransson, H. (2014) Voice and Text Messaging in Ship Communication, *Advances in Human Aspects of Transportation Part I*, (Eds.) N. Stanton, S. Landry, G. Di Bucchianico and A. Vallicelli. Published by AHFE Conference, pp. 193-191

Lützhöft, M., Grech, M. R. & Porathe, T. (2011). Human Factors in Maritime Operations. In P. Delucia (Ed.) *Reviews of Human Factors and Ergonomics: Volume 7*. Santa Monica, CA, USA: Human Factors and Ergonomics Society, pp. 280-322

Porathe, T. (2008) Pictures as tools for navigation: on maps and the effectiveness of visual iconicity. In B. Lärkner. & G. Svensson (Eds.). *Images, Science & Knowledge*. Linköping Studies in Art and Visual Communication 8, Linköping, 69 - 85.

Book Chapters (popular science)

Porathe, T. (2015) Electronics: Some friendly advice on bridge work. In M. Freeth (Ed.), *Navigation Accidents and their Causes*. London: The Nautical Institute., 83-90

Journals (popular science)

Hareide, Odd Sveinung; Porathe, Thomas. (2019) Maritime augmented reality. *Coordinates* : a monthly magazine on positioning, navigation and beyond. vol. February.

Refereed Journal Publications

Porathe, T. (2023). Ice Navigation in Arctic Offshore Wind Parks: Traffic Coordination Using Route Exchange and Moving Havens. *Eng. Proc.* 2023, 54(1), 55.

Porathe, Thomas. (2022) Programming "The ordinary practice of seamen" into the AI-navigator: friendly and communicative interaction design between autonomous and manned vessels. *Necesse*, 2022, 7 (1), 57-65.

Porathe, T. (2021). Human-automation interaction for autonomous ships: Decision support for remote operators. *TransNav, International Journal on Marine Navigation*

and Safety of Sea Transportation, Vol. 15, No. 3, doi:10.12716/1001.15.03.03, pp. 511-515.

Porathe, T., Fjørtoft, K.E. & Bratbergsengen, I.L. (2020). Human Factors, autonomous ships and constrained coastal navigation. IOP Conference Series: Materials Science and Engineering. 2020, 929 . <https://doi.org/10.1088/1757-899X/929/1/012007>

Porathe, T. (2019). Maritime Autonomous Surface Ships (MASS) and the COLREGS: Do We Need Quantified Rules Or Is “the Ordinary Practice of Seamen” Specific Enough? *International Journal on Marine Navigation and Safety of Sea Transportation*, 13(3), 511-517.

Porathe, T. & Ekskog, J. (2018). Egocentric leisure boat navigation in a smartphone based Augmented Reality application. *Journal of navigation*, 71(6), 1299-1311.

Porathe, T. (2016). Information Design in Nautical Charts: Dynamic NoGo Areas. *Information Design Journal*. Amsterdam: Benjamins.

Man, Y., Lundh, M., Porathe, T., & MacKinnon, S. (2015). From Desk to Field - Human Factor Issues in Remote Monitoring and Controlling of Autonomous Unmanned Vessels. In *Procedia Manufacturing*, (3), 2674-2681

Burmeister, H. C.; Bruhn, W. C.; Rødseth, Ø. J.; & Porathe, T. (2014). Autonomous Unmanned Merchant Vessel and its Contribution towards the e-Navigation Implementation: The MUNIN Perspective. In *International Journal of e-Navigation and Maritime Economy*, 2014, 1-13.

Porathe, T.; Lützhöft, M.; & Praetorius, G. (2013). Communicating intended routes in ECDIS: Evaluating technological change. In *Accident Analysis and Prevention*. 2013 (60), pp. 366– 370.

Lee, A.; Seojeong, L.; Baranowski, A; & Porathe, T. (2013). Harmonised Portrayal of e-Navigation-related Information. *International Journal on Marine Navigation and Safety of Sea Transportation*, 7 (1) pp. 39-43.

Porathe, T. (2012). Transmitting intended and suggested routes in ship operations: cognitive off-loading by placing knowledge in the world. *Work*, 41 (Supplement: 1) pp. 4873-4878.

Rigaud, E.; Lützhöft, M.; Kircher, A.; Schröder-Hinrichs, J-U; Baldauf, M.; Jenvald, J; & Porathe, T. (2012). Impact: More Than Maritime Risk Assessment. *Procedia - Social and Behavioral Sciences*, 48, pp. 1848–1854.

Porathe, T. & Strand, L. (2011) Which sign is more visible? Measuring the visibility of traffic signs through the conspicuity index method. *European Transport Research Review*, Heidelberg: Springer Verlag.

Bartusch, C & Porathe, T. (2011). Climate-smart information design: Visualizing residential electricity use over the Internet. *Information Design Journal*. Amsterdam: John Benjamins.

Porathe, T. (2008) Measuring effective map design for route guidance: an experiment comparing electronic map display principles. *Information Design Journal*, 16(3), 190-201. Amsterdam: John Benjamins Publishing Company.

Porathe, T. (2007) Nautiskt 3D-GIS med sikte på kognitiv avlastning och beslutsstöd. *Kart og Plan*, 3-2007, Vol 67, pp. 183–191. Fagbokforlaget, Bergen, Norway. ISSN 0047 – 3278

Porathe, T. (2007) »Real seamen never turn the chart upside down« Safer navigation with egocentric view 3-D nautical charts? *Mercator: Maritime Innovation, Research and Education*, September 2007. Weilbach & Co, Copenhagen, Denmark.
<http://mercatorinfo.dk/show/article/21>

Refereed Conference Publications

Porathe, T. (2023). Alarm and hand-over concepts for human remote operators of autonomous ships. In M. P. Brito, T. Aven, P. Baraldi, M. Čepin & E. Zio (Eds.) *Proceedings of the 33rd European Safety and Reliability Conference (ESREL 2023)*. doi: 10.3850/978-981-18-8071-1_P203-cd

Porathe, T. (2022) Where does the pilot go when the autonomous ship has no bridge? MASS Routing Service and smart Local Information Centres. *Proceedings of the Autonomous Ship Conference 2022*, National Maritime Museum, Greenwich, London, 31 March-1 April 2022. Royal Institution of Naval Architects

Porathe, T. (2022). Collision Avoidance for autonomous ships (MASS): making assumptions about other ships intended routes. In M. C. Leva, E. Patelli, L. Podofillini, & S. Wilson (Eds.) *Proceedings of the 32nd European Safety and Reliability Conference (ESREL 2022)*.

Porathe, T. (2022). Remote Monitoring of Autonomous Ships: Quickly Getting into the Loop Display (QGILD). In: Katie Plant and Gesa Praetorius (Eds.) *Human Factors in Transportation. AHFE (2022) International Conference*. AHFE Open Access, vol 60. AHFE International, USA.

Porathe, T. (2021). No-one in control: unmanned control rooms for unmanned ships? *Proceedings of the 20th International Conference on Computer and IT Applications in the Maritime Industries*, Mülheim, 9-10 August 2021, Hamburg University of Technology, Hamburg, Germany.

Porathe, T. (2021) Your friendly and communicative MASS: interaction design between autonomous and manned vessels. *Proceedings of the ERGOSHIP 2021 conference, 2-3 September 2021*, Korea Institute of Maritime and Fisheries Technology (KIMFT) Busan, Republic of Korea

Porathe, T. (2021). Human-Automation Interaction for a small Autonomous Urban Ferry: a concept sketch. In B. Castanier, M. Cepin, D. Bigaud & C. Berenguer (Eds.). *Proceedings of the 31st European Safety and Reliability Conference, (ESREL 2021)*, 19 – 23 September 2021, Angers, France.

Porathe, T. (2020) Deconflicting Maritime Autonomous Surface Ship traffic using Moving Havens. In P. Baraldi, F.P. Di Maio & E. Zio (Eds.) *Proceedings of the 30th European Safety and Reliability Conference and 15th Probabilistic Safety Assessment and Management Conference (ESREL2020 PSAM15)*. ISBN: 9789811485930.

Porathe, T. (2020). Moving Havens: an application of the e-Navigation service route exchange. *Proceedings of the International Conference on Human Factors*, 19-20 February 2020. The Royal Institution of Naval Architects, London.

Porathe, T. (2020). Ship Traffic Organization with Moving Havens: Ship and Shore Perspective. *Proceedings of European Navigation Conference (ENC) 2020*. IEEE (Institute of Electrical and Electronics Engineers), Dresden, Germany, 2020, pp. 1-10.

Porathe, T. (2019). Safety of autonomous shipping: COLREGS and interaction between manned and unmanned ships. In M. Beer and E. Zio (Eds.) *Proceedings of the 29th European Safety and Reliability Conference (ESREL 2019)*.

Porathe, Thomas. (2019) Interaction Between Manned and Autonomous Ships: Automation Transparency. *International Conference on Maritime Autonomous Surface Ships*, Busans, Korea, November 7. 2018 SINTEF proceedings.

Porathe, Thomas. (2019) Autonomous ships and the COLREGS: Automation Transparency and Interaction with Manned Ships. 18th International Conference on Computer and IT Applications in the Maritime Industries - COMPIT'19. Technische Universität Hamburg-Harburg, Tullamore, Ireland.

Porathe, T. & Lutzhoft, M. (2018). A harmonized display of e-navigation information: Workload and navigational control; Contextual control levels. In The Royal Institution of Naval Architects Human Factors Papers 2018. Royal Institution of Naval Architects 2018 ISBN 9781909024809. s. 49-56

Komandur, S. & Porathe, T. (2018). Contours of a Roadmap for Developing Scenarios for the World of Autonomous Ocean Systems. In The Royal Institution of Naval Architects Human Factors Papers 2018. Royal Institution of Naval Architects 2018 ISBN 9781909024809. s. 67-69

Porathe, T. (2018). Autonomous, unmanned cargo shipping, for better or for worse?. In the proceedings of Society and the Sea conference 2018: Investinblue - The Values of the Ocean and Coasts for Sustainable Development. Greenwich, London September 2018.

Porathe, T. (2018). Workload and navigational control: The control levels of COCOM as framework for ship bridge HMI design. Proceedings of the European Navigation Conference 2018, Gotheburg, Sweden

Porathe, T. (2018). Human Factors and Autonomous Ships: Automation transparency. Proceedings of the IALA world conference 2018, Incheon, Korea

Porathe, T. (2017). Is COLREG enough? Interaction between manned and unmanned ships. Proceedings of the 12th International Conference on Marine Navigation and Safety of Sea Transportation, TransNav 2017. 21-23 June 2017, Gdynia Poland. 191-194.

Porathe, T. (2016). Human-Centred Design in the Maritime Domain. In *Proceedings of The NordDesign Conference 2016*. Trondheim, Norway.

Porathe, T., & Bentzen B. M., (2015). Human-machine interaction between unmanned, autonomous, ships and manned non-SOLAS vessels in confined and inshore waters: research needs. In *Proceedings of The International Conference of Advanced Intelligent Maritime Safety and Technology (Ai-MAST 2015)*. Daejeon, South Korea, 52-56.

Porathe, T., & Bentzen B. M., (2015). Human Factors in e-Navigation: a study of Dynamic NoGo Area Visualization in Electronic Nautical Charts. In *Proceedings of The International Conference of Advanced Intelligent Maritime Safety and Technology (Ai-MAST 2015)*. Daejeon, South Korea, 102-109.

Porathe, T., Bentzen B. M., Borup, O., & Pedersen, P. (2015). Distribution and Display of Maritime Safety Information in an e-Navigation Context. In *Proceedings of the 18th International Conference on Ships and Shipping Research*. Milano:

Associazione di Italiana Tecnica Navale, University of Genua and Polytecnico di Milano, 551-559.

Man, Y., Lundh, M., Porathe, T., & MacKinnon, S. (2015). From Desk to Field - Human Factor Issues in Remote Monitoring and Controlling of Autonomous Unmanned Vessels. 6th International Conference on Applied Human Factors and Ergonomics and the Affiliated Conferences, Las Vegas, Nevada, USA, July 26–30, 2015.

Porathe, T. & Brødje, A. (2015). Human Factor Aspects in Sea Traffic Management. In V. Bertram (Ed.) *Proceedings of the 14th International Conference on Computer Applications and Information Technology in the Maritime Industries (COMPIT '15), 11-13 May 2015 in Ulrichshusen, Germany*. Hamburg, Technische Universität Hamburg- Harburg, 2015,

Porathe, T., Borup, O. Jeong, J.S., Park, J.H., Andersen Camre, D., & Brodje, A. (2014). Ship traffic management route exchange: acceptance in Korea and Sweden, a cross cultural study. In the Proceedings of the International Symposium Information on Ships, ISIS 2014, 4-5 September in Hamburg. pp. 64-79

Burmeister, H.C., Rødseth, Ø-J., & Porathe, T. (2014). Autonomous unmanned merchant vessel and its contribution towards the e-Navigation implementation: The MUNIN perspective. In proceedings of the 2nd International Symposium on Advanced Intelligent Maritime Safety and Technology (Ai-MAST) 2014.

Porathe, T., Eklund, P., & Göransson, H. (2014). Voice and Text Messaging in Ship Communication. Proceedings of the 5th AHFE Conference 19-23 July 2014.

Man, Y., Lundh, M., & Porathe, T. (2014). Seeking Harmony in Shore-based Unmanned Ship Handling - From the Perspective of Human Factors, What Is the Difference We Need to Focus on from Being Onboard to Onshore? Proceedings of the 5th AHFE Conference 19-23 July 2014.

Burmeister, H-C., Bruhn, W.C., Rødseth, O.J. & Porathe, T. (2014). Can unmanned ships improve navigational safety? Proceedings of the Transport Research Arena, TRA 2014, 14-17 April 2014, Paris.

Porathe, T. (2014). Remote Monitoring and Control of Unmanned Vessels –The MUNIN Shore Control Centre. Proceedings of the 13th International Conference on Computer Applications and Information Technology in the Maritime Industries (COMPIT '14) p. 460-467.

Porathe, T., Prison, J., & Man, Y. (2014). Situation awareness in remote control centers for unmanned ships. Proceedings of Human Factors in Ship Design & Operation, 26-27 February 2014, London: Royal Institute of Naval Architects.

Porathe, T., de Vries, L., & Prison, P. (2014). Ship voyage plan coordination in the MONALISA project: user tests of a prototype ship traffic management system In D. De Waard, K. Brookhuis, R. Wiczorek, F. Di Nocera, P. Barham, C. Weikert, A.

Kluge, W. Gerbino, and A. Toffetti, (Eds.) *Proceedings of the Human Factors and Ergonomics Society Europe Chapter 2013 Annual Conference*.

Rødseth, Ø. J.; Kvamstad, B.; Porathe, T.; & Burmeister, H-C. (2013). Communication Architecture for an Unmanned Merchant Ship. In *Proceedings of the OCEANS 2013 MTS/IEEE Conference*, Bergen Norway.

Porathe, T., Burmeister, H-C., & Rødseth, Ø. J. (2013). Maritime Unmanned Navigation through Intelligence in Networks: The MUNIN project. In *Proceedings of the 12th International Conference on Computer and IT Applications in the Maritime Industries*, COMPIT'13, Cortona, Italy, 15-17 April 2013, pp. 177-183.

Woźniak, P., Lützhöft, M., Porathe, T., Yantaç, E.E., & Fjeld, M. (2013). Examining interactive surfaces for maritime operations. In *Proceedings of ITS 2013, the 2013 ACM International Conference on Interactive Tabletops and Surfaces*. pp. 341-344.

Porathe, T. (2012). e-Navigation in Arctic Conditions: Transmitting High Resolution Ice Routes in First-year Ice. *Proceedings of Scandinavian Maritime Conference 2012*,

Porathe, T. (2012). Mental rotations and map use: cultural differences. *Proceedings of Scandinavian Maritime Conference 2012*,

Porathe, T.; & Shaw, G. (2012). Working with the human element: Human Factors and technical innovation from EfficienSea and on to ACCSEAS. *Proceedings of the International Symposium. Information on Ships, ISIS 2012*.

Porathe, T.; Lützhöft, M.; & Praetorius, G. (2012). What is your intention? Communicating routes in electronic nautical charts. *Procedia - Social and Behavioral Sciences*, 48 s. 3266-3273.

Rigaud, E., Lützhöft, M., Kircher, A., Schröder-Hinrichs, J.U., Baldauf, M., Jenvald, J., & Porathe, T. (2012) IMPACT: More Than Maritime Risk Assessment. In *Procedia - Social and Behavioral Sciences*, 48, pp. 1848–1854.

Porathe, T. (2011). 3D Computer Graphics and Nautical Charts. Go-3D 2011: Computergraphik für die Praxis : Tagungsband zur Konferenz Go-3D 2011,

Petersen, E. S.; Porathe, T.; & Lützhöft, M. (2011). Usability Heuristics: Friend or Foe in Maritime Navigation Instrument Design? *Proceedings of the International Symposium. Information on Ships, ISIS 2011*, Hamburg, Germany.

Porathe, T. (2010) "If this will be the way to drive a ship – just anyone could do it": 3D Nautical Charts. About creating acceptance and building standards for a VR within the maritime domain. Paper presented at the SIGRAD conference 2010 in Västerås.

Lützhöft, M; Porathe, T; Jenvald, J; & Dahlman, J. (2010). System Simulations for Safety. *Proceedings of the International Conference on Human Performance at Sea 2010.*, s. 3-10.

Porathe, T. (2008) Conspicuity index – looking for a possible objective measurement of visibility taking context into account. Published in the *Proceedings of the 40th Annual Conference of the Nordic Ergonomic Society*, Reykjavik, Iceland, August 11 – 13.

Porathe, T. (2008) 3-D Nautical Charts as Decision Support for Land Based Piloting. To be published at the 1st International Ship-Port-Interface Conference (ISPIC 2008) in Bremen, Germany 19-21 May 2008.

Prison, J. & Porathe, T. (2008) Design of Human-Map System Interaction
To be published at the ACM SIGCHI 26th CHI Conference in Florence, Italy 5-10 April 2008.

Prison, J. & Porathe, T. (2007) Navigation with 2-D and 3-D Maps: A Comparative Study with Maritime Personnel
Published in the *Proceedings of the 39th Nordic Ergonomics Society Conference*, 1-3 October 2007 at Lysekil, Sweden.

Porathe T. (2007) A 3-D Nautical GIS targeting Cognitive Off-loading and Decision Making. Published in ScanGIS 2007. *Proceedings of the 11th Scandinavian Research Conference on Geographic Information Science* 5th – 7th September 2007 Ås, Norway. J.T. Bjørke & H. Tveite (Eds.), Norwegian University of Life Sciences and Technology, Ås, Norway

Porathe, T. (2007) Measuring effective map design for route guidance: an experiment comparing electronic map display principles. Presented at the Vision Plus 12 conference “Information Design – Achieving Measurable Results” in Schwarzenberg, Austria 4-7 July 2007.

Porathe, T. (2007) User-Centered Map Design. In *Proceedings of the UPA 2007 Conference, Patterns: Blueprints for Usability*, June 11-15, 2007, Austin , Texas, USA.

Porathe, T. (2006). Real-Time Extraction of Course Track Networks in Confined Waters as Decision Support for Vessel Navigation in 3-D Nautical Chart. Presented at the *NATO Research and Technology Organization IST-063/RWS-010 Workshop Visualizing Network Information* at the Royal Danish Defense College in Copenhagen, Denmark 17-20 October 2006

Porathe T. (2006). Improved situation awareness in navigation using egocentric view 3-D nautical charts. Published in the *Proceedings of the 16th International Ergonomic Association's World Congress in Maastricht, Holland 2006*, R.N. Pikkar, E.A.P. Kooningsveld & P.J.M. Settels (Eds.), Elsevier Ltd, 2006. ISSN 0003-6870

Porathe, T. (2005). Navigation with exocentric 2-D and egocentric 3-D maps. In the *Proceedings of the Nordic Ergonomic Societies 37th annual conference (NES2005)* in Oslo, Norway, 10-12 Oct. 2005.

Porathe, T. (2005). Dynamic Coastal Views in 3-D Nautical Charts, Published in the *Proceedings of The International Conference Human Factors in Ship Design, Safety*

and Operation, Royal Institution of Naval Architects' (RINA) London, February 23 – 25 2005.

Porathe, T. (2004) Visualizing the Decision Space of a Ship's Maneuverability in a Real-Time 3-D Nautical Charts Presented at NATO Research and Technology Organization IST-043/RWS-006 Workshop *Visualisation and the Common Operational Picture (VizCOP)* at the Canadian Forces College in Toronto, Canada Sep. 14-17 2004

Porathe, T. (2004). *Landmark representation in 3-D nautical charts*, published in the *Proceedings of the Eighth International Conference on Information Visualisation, IV 2004. London, 14 – 16 July 2004*, IEEE, Computer Society, Los Alamos, California 2004, ISBN 0-7695-2177-0

Porathe, T. and Svensson, G. (2003). *From Portolan Charts To Virtual Beacons; An Historic Overview Of Mediated Communication At Sea*, Selected Readings of the International Visual Literacy Association's conference in Newport, Rhode Island, USA. 2003

Porathe, T. & Sivertun, Å. (2002) *Information Design for a 3D Nautical Navigational Visualization System*. In Proceedings of The Eight International Conference on Distributed Multimedia Systems, Redwoods, San Francisco, Karlifonien, USA, Sept. 2002.

Porathe, T. & Sivertun Å. (2002). *Real-Time 3D Nautical Navigational Visualisation*, presented at NATO's Research and Technology Organization's Workshop IST-036/RWS-005 Massive Military Data Fusion and Visualisation in Halden, Norway 10-13 Sep. 2002

Invited Conference, Workshop and Seminar Presentations

Porathe, T. (2021). VTS and e-Navigation: Traffic Organization using Moving Havens, IALA 2021 VTS symposium (Rotterdam/online) 12-16 Aril 2021

Porathe, T. (2019) Automation transparency: the Trondheim autonomous harbour ferry. The Autonomous Ship Technology Symposium, Amsterdam, 25-27 June 2019.

Porathe, T. (2019). Autonomous ships and human interaction. NTNU Ocean week 6-8 May 2019, Trondheim, Norway.

Porathe, T. (2019). Time for e-Navigation to deliver: research has produced; implementation is lagging. The e-Navigation Underway International Conference, Copenhagen-Oslo 6-8 February 2019.

Porathe, Thomas. (2018) Autonomous and unmanned: design & innovation in the maritime domain. Addressing Autonomy, Cybersecurity for Sustainable Mobility . NTNU, Dep. of Design, Gjøvik; Staur Gård, Hamar. 2018-11-06 - 2018-11-07.

Porathe, Thomas. (2019) Time for e-Navigation to deliver: research has produced but implementation is lagging and in the meantime accidents happen. e-Navigation

Underway International 2019 . Danish Maritime Authority and IALA; Ferry Copenhagen-Oslo. 2019-02-06 - 2019-02-08.

Porathe, T. (2018). Interaction design, workload and control: some human limitations and what we can do about it. Kongsberg Technology Conference, Sundvolden 14 sep. 2018

Porathe, T. (2018). What is actually going on? HMI design and situation awareness in remote monitoring and control of unmanned ships. Human Factors Challenges of Remotely Operated / Autonomous Transport; Danish Maritime Industry 2030 Kick Off Conference 2018-02-05

Porathe, T. (2018) Människan och de autonoma skeppen: Hur ser lägesbilden ut i landcentralen? Transportstyrelsens Sjöfartsseminarium, 3 feb. 2018

Porathe, T. (2016). What is information overload: human factors in presentation of data. The e-Navigation Underway conference 2016, Copenhagen-Oslo ferry 2-4 February 2016.

Porathe, T. (2016). What will be the role of the navigator when automation takes over? Transportforum, Linköping, Sweden, 13 January 2016.

Porathe, T. (2015). Ubemannet lasteskip langs norskekysten, utfordringer og muligheter. Transport- og logistikk messen, 20 October 2015, Oslo, Norway.

Porathe, T. (2015). The monitoring navigator: human factors in design of maritime informatics. Maritime Informatics Conference, Lighthouse, Victoria Institute, Lindholmen, Göteborg, Sweden, 18 May 2015.

Porathe, T. (2015). Forbedret brukergrensesnitt ved innføring av ny teknologi. Innovasjonskonferensen e-nav.no 2015, 5-6 May, The Oslo School of Architecture and Design, Oslo, Norway.

Porathe, T. (2015). ACCSEAS testbed on tactical route exchange: Intended and Suggested routes, and NoGo Area services. Presentation at the IALA e-Navigation Committee meeting, Paris, 20-24 April 2015.

Porathe, T. (2015). Route exchange in one-year ice. NNF Workshop: eNav and the Arctic, 24 March 2015, DNV-GL Headquarters, Oslo.

Porathe, T. (2015). HMI - hva med menneskene når bilene kjører selv? Intelligent Traffic Systems Conference (ITS 2015), 18 March, Trondheim, Norway.

Porathe, T., Eklund, P., & Göransson, H. (2015). Voice and Text Messaging in Ship Communication. Presentation at the e-Navigation Underway conference, DFDS ferry Copenhagen-Oslo 27-29 January 2015.

Porathe, T. (2014). Prosjekt MONALISA: Autonome skip. Norsk Forening for Automatiserings konferens Beslutningsstøtte. Trondheim, 5-6 October 2014.

Porathe, T., Borup, O., Jeong, J.S., Park, J.H., Camre, D. & Brødje, A. (2014). Ship traffic management route exchange; acceptance in Korea and Sweden: a cross-cultural study. Presentation at the IALA e-Navigation Committee meeting in Paris, 13-17 September 2015.

Porathe, T. (2014). Navigational shore support: A new perspective. Workshop on unmanned ships at the SMM trade fair, Hamburg, Germany, 11 September 2014.

Porathe, T. (2014). Human factors in remote monitoring and control of unmanned vessels (the MUNIN project). Human Factors in Control Rooms, HFC-forum, Halden, Norway, 23-24 April 2014.

Porathe, T. (2014) Human factors in remote control of unmanned vessels. SARUMS workshop 27 March 2014, European Defence Agency, Brussels, Belgium.

Porathe, T. (2014). e-Navigation Test Beds in EfficienSea and MONALISA: Sea & Simulator Trials. Presentation at the 2nd International Workshop on Global e-Navigation Test Beds. At the e-Navigation Underway Conference on the DFDS ferry Copenhagen-Oslo 27-29 January 2014.

Porathe, T. (2013). Visualization of large amounts of data: Depth visualization in nautical charts. Presentation at DIVA Interaction Design Summer School Chalmers, 20 September 2013.

Porathe, T. (2013). Unmanned Autonomous Ships: The MUNIN project. Baltic Sea e-Navigation Forum: e-navigation seminar, Helsinki, Finland, August 22-23, 2013.

Porathe, T. (2013). Experiences from European e-Navigation testbeds. Presentation at KIOST (Korean Institute of Ocean Science and Technology) and Mokpo National Maritime University, Korea, 20-21 August 2013.

Porathe, T. (2013). The Human Factor and e-navigation. Nordic Institute of Navigation one-day e-Navigation conference 12th February 2013 – Lillestrøm, Norway.

Porathe, T. (2013). Working with the human element: Decision support systems and the human factor. E-Navigation Underway Conference 2013, 29-31 January 2013 on the ferry Copenhagen-Oslo.

Porathe, T. (2012). The ACCSEAS project: e-Navigation solutions to North Sea accessibility problems. The e-Navigation Conference 2012, Seattle, USA, 6 November 2012.

Porathe, T., & Liu, Z. (2012). Map design: A wayshowing experiment in Sweden and China using maps in different orientations. Information Design Conference 2012, 12-13 April 2012, Greenwich, London

Porathe, T. (2012). Efficiency and accessibility for shipping in the North Sea Region. 5th Optimising Port development, London 24th October 2012.

Porathe, T. (2011). 3D Nautical Charts : Cognitive Off-Loading Using an Egocentric Presentation Mode. 51st Meeting of the Civil GPS Service Interface Committee at the ION GNSS 2011 Conference, Oregon Convention Center, Portland, Oregon, September 19-20, 2011.

Porathe, T., Forsman, F., & Borup, O. (2011). Distributing search patterns using ECDIS. World Maritime Rescue Congress, Shanghai 24-28 August 2011

Porathe, T. (2010) A 3-D Nautical GIS. Presentation held at the 2nd International Hydrographic Organization - Hydrographic Services and Standards Committee meeting in Rostock, Germany, 26-29 October 2010.

Porathe, T. (2010) Cognitive Off-loading and 3-D Charts: Conning with Dynamic Coastal Views. Presentation held at Kort og Matrikelstyrelsen in Copenhagen, Denmark on 19 May 2010.

Porathe, T. (2010) A 3-D Nautical GIS targeting Cognitive Off-loading and Decision Making. Presentation held at the Joint International Hydrographic Organization - TSMAD20 (Transfer Standard Maintenance and Application Development Working Group) & DIPWG2 (Digital Information Portrayal Working Group) meeting in Rostock, Germany, 3-7 May 2010.

Porathe, T. (2010) Conspicuity Index: A Method of Measuring the Visibility of Traffic Signs. Presentation held at the 5th International IIID Expert Forum on Traffic & Transport Information Systems, 9 —10 September 2010, Tech Gate Vienna, Austria.

Porathe, T. (2010) Människa - kartinteraktion Användbarhet och användartestning av kartsystem . Presentation held at the GeoTest seminar in Gävle, Sweden, 16 March 2010.

Porathe, T. (2010) Aktuell sjöfartsforskning: E-Navigation, EfficenSea, BLAST & Virtuella sjömärken. Presentation held at the Swedish Navy's Nautical Seminar, 27 January 2010.

Porathe, T. (2009) Navigation and Mental Rotations. Presentation held at CSMART (Center for Simulator Maritime Training), in Almere, Netherlands, 23 September 2009.

Porathe, T. (2009) 3D-sjökort: navigation med dynamiska förtoningar. Presentation held at the NorSIM (Nordic Simulator Trainers) conference in Gotheburg, Sweden, 19 September 2009.

Porathe, T. (2009) Design Research. Presentation held at a seminar at Force Technology in Copenhagen, Denmark, 23 June 2009.

Porathe, T. (2009) 3D i hjernen – vitenskapelige resultater. Presentation held at the GeoForum 2009 conference in Oslo, Norway, 25.-27 March 2009.

Porathe, T. (2009) Minimering av mentala rotationer. Presentation held at the Swedish Navy's Nautical Seminar, 22 January 2009.

Porathe, T. (2009) Vision militärleder: Realtidsgenererade "unika" leder för specifika fartyg baserade på rådande förhållanden. Presentation held at the Swedish Navy's Nautical Seminar, 22 January 2009.

Porathe, T. (2008) Effektivare navigering med egocentriska 3D-kartor. Presentation held at the GeoInfo 2008 conference in Malmö, 1-3 October 2008

Porathe, T. (2008) 3D-navigering –säkrare och enklare. Presentation held at the working seminar Trygg i fritidsbåt – användelse av ny teknologi, 10 June 2008, in, Oslo, Norway.

Porathe, T. (2008) 3D-sjökort: Navigation med dynamiska förtoningar. Presentation held at a seminar for the Swedish Maritime Administration in Stockholm, 10 September 2008..

Porathe, T. (2008) Sjökort i 3D. Presentation held at ULI and GI Norden's seminar 3D-GIS, 4 March 2008 in Stockholm, Sweden.

Porathe, T. (2008) *"Real mariners never turn the chart upside down!"* Presentation on Oxford Aviation Academy, Arlanda 12 February 2007

Porathe, T. (2008) *Sjökort i 3D*. Presentation on ULI and GI Nordens seminar 3D-GIS, 4 Mars 2008 i Stockholm.

Porathe, T. (2007) *Integrerade fartygsbryggor - kognitiva svårigheter*. Presentation på Radionavigerings nämndens seminarium i Stockholm den 11 oktober 2007

Porathe, T. & Prison, J. (2007) *3-D Nautical Charts Navigation Using Dynamic Coastal Views*. Presentation held at the Transas Simulator Users Conference 2007 in Göteborg, Sweden 26 - 28 June 2007.

Porathe, T. (2007). *Work on the ship bridge: cognitive off-loading with improved information visualization in nautical charts for remote pilotage*. Presentation held at the Working with Computer Systems 2007 conference in Stockholm, Sweden 12-27 May 2007.

Porathe, T. (2007) *3D-sjökort: Navigation med dynamiska förtoningar*. Presentation på Nämnden för båtlivsutbildnings konferens för förhørsförättare i Göteborg den 10 feb. och i Stockholm den 10 mars 2007

Porathe, T. (2007) 3D-sjökort: Navigation med dynamiska förtoningar. Presentation på Marinens nautiska seminarium, 24 januari 2007

Porathe, T. (2007) *3D-sjökort och säker navigering*. Presentation på Transport Forum 2007, Linköping, 10-11 januari 2007