

Professor Roger Skjetne

Work experience!

2009 – Current Dept. Marine Technology, NTNU, Trondheim, Norway: Professor in marine control engineering

- ◆ Holds a [Maritime Knowledge Hub](#) professorship position in marine control engineering; the *Kongsberg Maritime* chair.
- ◆ (2017-2018) Research sabbatical Center for Control, Dynamical-systems and Computation (CCDC) at University of California at Santa Barbara (UCSB).
- ◆ (2013.08-2017.07) Leader of the Marine Structures research group at the Department of Marine Technology at NTNU.
- ◆ **Management research projects:**
 - (2011-2019) Centre for Research-based Innovation, CRI “**SAMCoT: Sustainable Arctic Marine and Coastal Technology**”, RCN project no. 203471. **Leader** of Work Package 5: “Ice management and design philosophy”. Supervisor 1 PhD stud.
 - (2010-2014) KMB project “**Arctic DP: Safe and Green Dynamic Positioning Operations of Offshore Vessels in an Arctic Environment**”, RCN project no. 199567. Project manager and supervisor 3 PhD students and 2 postdocs.
 - (2016-2020) KPN project “**Hybrid Testing: Real-Time Hybrid Model Testing for Extreme Marine Environments**”, RCN project no. 203471. Leader WP1 and supervisor 1 PhD stud.
- ◆ **Participation other research projects:**
 - (2015-2023) Norwegian Centre of Research-based Innovation, “**MOVE: Marine Operations**”. Supervisor 1 PhD stud.
 - (2013-2022) Norwegian Centre of Excellence, “**AMOS: Centre for Autonomous Marine Operations and Systems**”. Supervisor 1 PhD stud.
 - (2011-2017) KPN project, “**D2V: Design of Control Systems for Safe and Energy-efficient Vessels with Hybrid Power Plants**”. 1 PhD stud.
 - (2012-2016) KPN project, “**LEEDS: Low Energy and Emission Design of Ships**”. Supervisor of 1 PhD stud.
 - (2011-2016) NTNU “**AUR-Lab: Applied Underwater Robotics Lab**”, Supervisor of 1 PhD stud.
 - (2009-2012) Norwegian Centre of Excellence, “**CeSOS: Centre for Ships and Ocean Structures**”. 1 PhD stud and associated researcher.
- ◆ **Teaching courses:**
 - (2009-2015) TMR4290 – Marine electric power and propulsion systems; (2011-2020) TMR4243 – Marine control systems II; (Fall 2010-2013) TMR4515 – Specialization subjects in marine control eng; (2013-2020) MR8500 – Advanced topics in marine control systems.
- ◆ **Students:**
 - 6 PhD students completed, 6 in progress. 2 post-docs completed, 1 in progress. Supervised 68 MSc students (Spring 2020).

2004 – 2009 Marine Cybernetics AS, Trondheim, Norway: Product Manager Power & Drilling Systems

- ◆ **R&D projects:** (2004 - 2008) Development of the CyberSea Simulator, (2004 - 2006) Development of DP-HIL Testing, (2005 - 2005) DNV Standard for Certification of HIL Testing consultancy, (2006 - 2009) Development of PMS-HIL Testing, (2008 - 2009) Development of Drill-HIL Testing.
- ◆ **Delivery projects:** (Au.-Oct. 2004) Viking Poseidon DP-HIL Testing, (May-Jun. 2005) Consultancy Kongsberg Automotive, (Jan.-Mar. 2006) Acergy Osprey DP-HIL Testing, (Feb. 2006 – Jan. 2007) Island Frontier DP-HIL Testing, (Jun. 2006 – Nov. 2007) Ulstein Verft NB275 PMS-HIL Testing, (Jun. 2006-Nov. 2007) Ulstein Verft NB276 PMS-HIL Testing, (Jun. 2006 – Dec. 2007) Aker Yards Brattvåg NB117 (Edda Fauna) DP-HIL and PMS-HIL Testing, (Jul. 2006) Stena Trader, Fosen Mekaniske Verksted (FMV) Speed and Maneuvering Trials, (Oct.-Nov. 2006) Normand Flower DP-HIL Testing, (Jan. 2007 – Mar. 2008) DNV Consultancy 2007, (Mar.-Aug. 2007) CSO Wellservicer DP-HIL Testing, (Apr. 2007 – Mar. 2008) Aker Yards Brevik NB47 (Far Seeker) DP-HIL Testing, (Mar. 2008 – Feb. 2009) DNV Consultancy 2008.

1991 – 1999 Aker Elektro AS, Stord Norway: Electrician

- ◆ **Apprentice:** 1991 - 1993
- ◆ **Projects: (Oil Installations):** Jun. 1991 – Mar. 1992: Snorre A, Mar. 1992 – Aug. 1992: Sleipner A, Aug. 1992 – Nov. 1992: Embla, Nov. 1992 – Aug. 1993: Nelson Drilling Module, Feb. 1993 – Aug. 1994: Troll A, Dec. 1994: Heidrun, Jun. 1995 – Aug. 1995: Sleipner M12, Feb. 1996: Tjeldbergodden Methanol Factory, Jun. 1996 – Aug. 1997: Njord, Jun. 1997 – Jul. 1997: Norne, Jul. 1998 – Sept. 1998: Åsgard A, Jun. 1999 – Aug. 1999: Veslefrikk B.
- ◆ **Competitions:** (1994) Participated in the final of the Norwegian Championship for young electricians.

PhD students and theses!

- ◆ **Mathias Marley** (2019-2022) “Resilient hybrid motion control of autonomous marine vessels.”
- ◆ **Jon Bjørnø** (2016-2020) “Optimal icebreaker deployment and coordination for effective ice management tactics.”
- ◆ **Einar S. Ueland** (2016-2020) “Fundamental constraints, optimal control, and estimation strategies in the hybrid test loop.”
- ◆ **Andreas R. Dahl** (2013-2020) “Nonlinear and fault-tolerant control of electric power production in DP vessels.”
- ◆ **Laxminarayan Thorat** (2013-2020) “Energy control for highly redundant shipboard electric power production systems.”
- ◆ **Svenn A. T. Værnø** (2014-2020) “Transient control in DP: Investigation of residual load models and compensation strategies.”
- ◆ **Zhengru Ren** (2016-2019) “Advanced Control Algorithms to Support Automated Offshore Wind Turbine Installation.” [PhD defence 21.08.2019.](#)
- ◆ **Hans-Martin Heyn** (2014-2019) “Motion sensing on vessels operating in sea ice: A local ice monitoring system for transit and stationkeeping operations under the influence of sea ice.” [PhD defence 15.05.2019.](#)
- ◆ **Petter Norgren** (2013-2018) “Autonomous underwater vehicles in Arctic marine operations: Arctic marine research and ice monitoring.” [PhD 3.09.2018.](#)
- ◆ **Øivind K. Kjerstad** (2010-2016) “Dynamic Positioning of Marine Vessels in Ice.” [PhD defence 31.05.2016.](#)
- ◆ **Qin Zhang** (2011-2015) “Image Processing for Ice Parameter Identification in Ice Management.” [PhD defence 17.12.2015.](#)
- ◆ **Bo Zhao** (2009-2015) “Particle Filter for Fault Diagnosis: Applications to Dynamic Positioning Vessels and Underwater Robotics”. [PhD def. 30.06.2015.](#)

Post-docs!

- ◆ **Zhengru Ren** (2019-2021) Research on control and monitoring for demanding marine operations, particularly offshore wind installation, in SFI MOVE.
- ◆ **Biao Su** (2012-2014) Research on ice mechanics in the “Arctic DP” project.
- ◆ **Francesco Scibilia** (2010-2012) Research on guidance and control for Ice Management in “Arctic DP” project.

Spin-off companies!

- ◆ **ArclSo AS:** (2016) Co-founder of ArclSo AS and chairman of board. Delivers SW and consultancy solutions for Arctic structures and operations.
- ◆ **BluEye Robotics AS:** (2015) Co-founder of company. Delivers high-quality underwater drones to mass consumer market.

Education!

2000 – 2005 Norwegian University of Science and Technology (NTNU), Trondheim, Norway

Degree: Doctor of Philosophy – Engineering Cybernetics

- ◆ Ph.d. thesis: "The Maneuvering Problem", awarded ExxonMobil prize 2005 for best ph.d. thesis on applied research at NTNU.
- ◆ Main advisor: Prof. Thor I. Fossen (NTNU), Co-advisor: Prof. Petar V. Kokotovic (UCSB); Research stays at UCSB 2000/2001.

1999 – 2000 University of California, Santa Barbara (UCSB), Santa Barbara, USA

Degree: Master of Science - Control Engineering

- ◆ Working in the student lab of Prof. Petar Kokotovic. Teaching Assistant: Winter 2000 and Spring 2000.

1997 – 2000 University of California, Santa Barbara (UCSB), Santa Barbara, USA

Degree: Bachelor of Science - Electrical Engineering

- ◆ Admitted to the five year BSc/MSc program at the electrical engineering department in 1998.

1997 Manchester Metropolitan University (MMU), Manchester, England

Thesis project: "Development of a Self-Tuning PID-Controller." (Exchange student in the EU ERASMUS program.)

1994 – 1997 Bergen College (HiB) Bergen, Norway

Degree: Automation engineering degree (Norwegian: Høgskoleingeniør): Dept. Electrical Engineering, Automation.

Vocational schools

1993 - 1994 **Stord Vocational School, Stord, Norway:** Preliminary studies for Engineering College.

1991 - 1994 **Aker Elektro AS, Stord, Norway:** Degree: Skilled electrician certificate. Apprenticeship Jun. 1991- Aug. 1993.

1989 - 1991 **Stord Vocational School, Stord, Norway:** (1989-90) Basic Course – electrical theory and practical installations. (1990-91) Advanced Course I – electrical theory and practical installations.

Other courses!

- ◆ **2013: Falck Nutec,** "Basic Safety and Emergency Training – Refresher Course with HUET and airpocket." Trondheim, Norway.
- ◆ **2009: Falck Nutec,** "Basic Safety and Emergency Training – Refresher Course with HUET and airpocket." Trondheim, Norway.
- ◆ **2009: Norsk Petroleum- Undervisning AS,** "Introductory course in drilling technology." Trondheim, Norway.
- ◆ **2008: Maersk Drilling,** "Drilling familiarization course – Maersk Developer Drill Rig." Korsør, Denmark.
- ◆ **2005: ResQ AS,** "Basic Safety Training Course – incl. Helicopter Underwater Escape Training (HUET)." Haugesund, Norway.
- ◆ **2001: Total Consult AS,** "Development Program in Management and Performance." Trondheim, Norway.
- ◆ **2001: NTNU,** "French language course level 1+2 of 4." Trondheim, Norway.
- ◆ **1998: Tau Beta Pi,** "Basic People Skills Module – Describing Problems, Motivating Others." Santa Barbara, USA.
- ◆ **1994: NETS national student organization,** "Organizational techniques – Conf. Leadership, Speech Techn., and Organizational Work." Voss, Norway.

Board, council, and committee positions!

- ◆ **ArcIso AS:** (2016 - present) Co-founder and Chairman of Board in NTNU spin-off company ArcIso AS.
- ◆ **NTNU R/V Gunnerus:** (Fall 2015 - present) Member of user panel for the research ship R/V Gunnerus.
- ◆ **Marine Cybernetics AS:** (Spring 2008 – Summer 2009) Elected board member by employees of Marine Cybernetics.
- ◆ **Bergen College Council:** (1995 - 1996) Board member of Bergen College Council.
- ◆ **Bergen College Student Council:** (1995 - 1996) Board member of the Main Student Council of Bergen College.
- ◆ **NETS:** (1995 - 1996) Board member of the National Student Organization NETS that represent students in technology majors.
- ◆ **Student Council:** (1994 – 1996) Board member of the Student Council at Engineering and Economics Dept., Bergen College.

Scientific review activities!

- ◆ Expert evaluator 2013 Netherland Techn. Foundation STW, prop. 13276, "ShipDrive".
- ◆ Reviewer for many journal papers in Automatica (IFAC), Trans. Control Systems Technology (IEEE), Trans. on Mechatronics (IEEE), J. on Oceanic Engineering (IEEE), Ships and Ocean Structures (Taylor & Francis), Int. Journal of Control (Taylor & Francis), Control Theory and Applications (IET), J. of the Franklin Institute, Int. J. of Adaptive Control and Signal Processing (Wiley), as well as many international conferences.
- ◆ Committee member and administrator for 4 PhD defenses.
- ◆ Scientific evaluator of applicants for NTNU adjunct professor position in underwater robotic, 2013.

Awards!

- ◆ **2016: China Scholarship Council:** Professor's honor in *2015 National Award Outstanding Self-financed Chinese Students Study Abroad* for Bo Zhao.
- ◆ **2014: China Scholarship Council:** Professor's honor in *2013 National Award Outstanding Self-financed Chinese Students Study Abroad* for Qin Zhang
- ◆ **2005: Norwegian Univ. of Science & Technology, Trondheim, Norway:** Exxon Mobil prize 2005 for best PhD thesis in applied research at NTNU.
- ◆ **2004: American Control Conference, Boston, USA:** Session best student speaker award "Maneuvering dynamical systems by sliding-mode control."

Patents!

- ◆ "Method and system for testing a control system for a marine petroleum process plant", Proprietor: Marine Cybernetics AS, Norway patent no.: NO 323949 B1, European Patent Office, 11.10.2006.
- ◆ "Test method and system for dynamic positioning systems", Proprietor: Marine Cybernetics AS, Norway pat. no.: NO 322007 B1.
- ◆ "A method and a system for testing of a Power Management System of a marine vessel", Proprietor: Marine Cybernetics AS, US patent no.: US 7,467,051 B2, PCT patent application.
- ◆ "Method and system for improved DP/PMS testing of a marine control system", Proprietor: Marine Cybernetics AS, Norway pat. no.: NO 327025.
- ◆ "Method for testing a combined dynamic positioning and power control system", Proprietor: Marine Cybernetics AS, Norway patent no.: NO 320841 B1, PCT and US, 05.04.2004, European Patent Office, 14.04.2005.

Research expeditions!

- ◆ **2015.09.17-10.02: Oden Arctic Technology Research Cruise (OATRC 2015):** Expedition with Icebreaker Oden to North of Svalbard, 82.5° N.
- ◆ **2016.10.17-21 & 2016.11.14-18: AMOS DP Research Cruise (ADPRC 2016):** Fullscale testing of DP algorithms on RV Gunnerus in Trondheim Fjord.

Keynote lectures!

- Center for Control, Dynamical-systems and Computation (CCDC) at University of California at Santa Barbara (UCSB), "Control and Estimation for Effective Stationkeeping Operations in Sea-ice", Nov. 3, 2017.
- 6th Annual Seminar OSVs for Ice and Cold Climates, Lloyd's Maritime Academy, "Determining ice loads for OSVs", London, Nov. 30, 2015.
- IBC Maritime Ice Class Vessels conference. Chairman of conference with keynote lecture "Arctic DP: The Arctic Offshore Project on Stationkeeping in Ice", Seoul, Oct. 28-29, 2014.
- Marcus Evans 2nd Annual Arctic Marine Logistics & Infrastructure Forum, "Dynamic positioning in ice for offshore vessels: Results from the Arctic DP Project", Amsterdam, Nov. 25-26, 2013.
- OSV Conference 2013, Technical Workshop on Equipping OSVs for Ice & Harsh Environments, "Dynamic positioning in ice for offshore vessels", Oslo, Oct. 23-25, 2013.
- 9th Annual Arctic Shipping Forum (ASF 2013), "Designing for effective stationkeeping in ice", Helsinki, April 23-26, 2013.
- 3rd Annual Seminar OSVs for Ice and Cold Climates, Lloyd's Maritime Academy, "Designing for effective stationkeeping in ice", London, Nov. 20, 2012.
- 8th Annual Arctic Shipping Forum (ASF 2012), "Designing for effective stationkeeping in ice", Helsinki, April 24-27, 2012.

Textbooks, book chapters, PhD thesis, and selected reports!

- Zhang, Q. and R. Skjetne (2018), "Sea Ice Image Processing with Matlab®". CRC Press, Taylor & Francis. Boca Raton, FL. ISBN 9781138032668.
- Skjetne, R. (2005), "The Maneuvering Problem." Norwegian Univ. Science & Technology, Dept. Eng. Cybernetics, NTNU PhD thesis 2005:1, ISBN 8247168596 (el), ISBN 8247168618 (pr), ISSN 1503-8181, Trondheim, Norway, March 2005.
- Skjetne, R., "Maneuvering Control." In T.I. Fossen (editor) Marine Control Systems: Guidance, Navigation, and Control of Ships, Rigs, and Underwater Vehicles, Chapter 10.2, pp. 394-416. Marine Cybernetics, Trondheim, Norway, 2002.
- Skjetne, R. (2004), "Set-stability for nonlinear systems", tech. report: 2004-8-W, NTNU Dept. Eng. Cybernetics, Nov. 1, 2004.
- Skjetne, R. and Sørensen, A. J. (2004), "Computer-based systems on ships and offshore vessels: The Software Problem ++", joint report by Marine Cybernetics, Det Norske Veritas, Statoil, Smedvig Offshore, Kongsberg Maritime, Norsk Hydro, Stolt Offshore, Eidesvik, Subsea 7, Solstad Offshore, Ulstein, ABB, PSA Norway, and Norw. Maritime Dir., Trondheim, Oct. 27 2004.

Journal and magazine articles!

- Ueland, E., T. Sauder, and R. Skjetne, "Optimal Force Allocation for Overconstrained Cable-Driven Parallel Robots: Continuously Differentiable Solutions with Assessment of Computational Efficiency." IEEE Trans. On Robotics, 2021 (online from 2020). DOI: 10.1109/TRO.2020.3020747
- Ren, Z., R. Skjetne, A. S. Verma, Z. Jiang, Z. Gao, K. H. Halse, "Active heave compensation of floating wind turbine installation using a catamaran construction vessel." Marine Structures, Vol. 75, p.102868, 2021 (online from 2020).
- Skjetne, R. and Z. Ren, "A survey on modeling and control of thruster-assisted position mooring systems." Marine Structures, Vol. 74, p.102830, 2020.
- Ren, Z., R. Skjetne, Z. Jiang, and Z. Gao, "Active Single-Blade Installation Using Tugger Line Tension Control and Optimal Control Allocation." International Journal of Offshore and Polar Engineering, Vol. 30, No. 2, pp.220-227, June 2020.
- Borisov, O. I., A. R. Dahl, A. A. Pyrkin, F. B. Gromova, and R. Skjetne, "Consecutive Compensator in Station-Keeping of a Surface Vessel." Mechatronics, Automation, Control, Vol. 21, No. 10, pp.566-574, 2020. DOI: 10.17587/mau.21.566-574
- Heyn, H.-M., M. Blanke, and R. Skjetne, "Ice condition assessment using onboard accelerometers and statistical change detection." IEEE J. Oceanic Engineering, Vol. 45, No. 3, pp. 898-914, 2020 (online from 2019).
- Kim, E., G. S. Dahiya, S. Løset, and R. Skjetne, "Can a computer see what an ice expert sees? Multilabel ice objects classification with convolutional neural networks." Elsevier, Results in Engineering, Vol. 4, 2019.
- Reddy, N. P., M. K. Zadeh, C. A. Thieme, R. Skjetne, A. J. Sørensen, S. A. Aanonsen, M. Breivik, and E. Eide, "Zero-emission autonomous ferries for urban water transport: Cheaper, Cleaner Alternative to Bridges and Manned Vessels." IEEE Electrification Magazine, 7(4), pp. 32-45, Dec. 2019.
- Værmø, S.A., A.H. Brodtkorb, and R. Skjetne, "Compensation of bias loads in dynamic positioning of marine surface vessels." Ocean Eng., V.178, 2019.
- Værmø, S.A., R. Skjetne, Ø. K. Kjerstad, and V. Calabrò, "Comparison of control design models and observers for dynamic positioning of surface vessels." IFAC Control Engineering Practice, Vol. 85, pp. 235-245, 2019.
- Ren, Z., R. Skjetne, Z. Jiang, Z. Gao, and A.S. Verma "Integrated GNSS/IMU hub motion estimator for offshore wind turbine blade installation." Mechanical Systems and Signal Processing, Vol. 123, pp.222-243, 2019.
- Ren, Z., R. Skjetne, Z. Gao, "A crane overload protection controller for blade lifting operation based on model predictive control." Energies, 12(1), 2019.
- Ren, Z., Z. Jiang, Z. Gao, and R. Skjetne, "Active tugger line force control for single blade installation." Wind Energy, 21(12), pp.1344-1358, 2018.
- Norgren, P. and R. Skjetne, "A multibeam-based SLAM algorithm for iceberg mapping using AUVs." IEEE Access, Vol. 6, No. 1, pp.26318-26337, 2018.
- Heyn, H.-M. and R. Skjetne, "Time-frequency analysis of acceleration data from ship-ice interaction events." Cold Regions Science and Technology, Vol. 156, pp. 61-74, 2018.
- Kjerstad, Ø.K., W. Lu, R. Skjetne, and S. Løset, "A Method for the Real-time Estimation of Full-scale Global Ice Loads on Floating Structures." Cold Regions Science and Technology, Vol. 156, pp. 44-60, 2018.
- Brodtkorb, A.H., S.A.T. Værmø, A.R. Teel, A.J. Sørensen, and R. Skjetne, "Hybrid Controller Concept for Marine Vessels with Experimental Results." Automatica, Vol. 93, pp. 489-497, 2018.
- Ren, Z., Z. Jiang, R. Skjetne, and Z. Gao, "Development and application of a simulator for offshore wind turbine blades installation." Ocean Engineering, Vol. 166, pp. 380-395, 2018.
- Xu, J., Z. Ren, Y. Li, R. Skjetne, and K. H. Halse, "Dynamic Simulation and Control of an Active Roll Reduction System Using Free-Flooding Tanks With Vacuum Pumps." Journal of Offshore Mechanics and Arctic Eng., 140(6), pp. 9, 2018.
- Kjerstad, Ø.K., S. Løset, R. Skjetne, and R. Skarbø, "An Ice-Drift Estimation Algorithm Using Radar and Ship Motion Measurements." IEEE Trans. Geoscience and Remote Sensing, 56(6), pp. 3007-3019, 2018.
- Sørensen, A.J., R. Skjetne, T. Bø, M.R. Miyazaki, T.A. Johansen, I.B. Utne, and E. Pedersen, "Toward Safer, Smarter, and Greener Ships: Using hybrid marine power plants." IEEE Electrification Magazine, Vol. 5, No. 3, pp. 68-73, 2017.
- Værmø, S.A., A. H. Brodtkorb, R. Skjetne, and V. Calabrò, "Time-Varying Model-Based Observer for Marine Surface Vessels in Dynamic Positioning." IEEE Access, Vol. 5, pp. 14787-14796, 2017.
- Kjerstad, Ø.K. and R. Skjetne, "Disturbance rejection by acceleration feedforward for marine surface vessels." IEEE Access, Vol.4, pp.2656-2669, 2016.
- Vekslø, A., T.A. Johansen, R. Skjetne, and E. Mathiesen, "Thrust Allocation With Dynamic Power Consumption Modulation for Diesel-Electric Ships." IEEE Trans. Control Systems Technology, Vol. 24, No.2, pp. 578-593, 2016.

25. Bø, T.I., A.R. Dahl, T.A. Johansen, E. Mathiesen, M. R. Miyazaki, E. Pedersen, R. Skjetne, A. J. Sørensen, L. Thorat, and K. K. Yum, "Marine Vessel and Power Plant System Simulator." *IEEE Access*, Vol. 3, pp. 2065-2079, 2015.
26. Jørgensen, U. and R. Skjetne, "Online reconstruction of drifting underwater ice topography: The 2D case." *Asian J. Control*, 17(5), pp.1509-1521, 2015.
27. Kjerstad, Ø.K., I. Metrikin, S. Løset, and R. Skjetne, "Experimental and phenomenological investigation of dynamic positioning in managed ice." *Cold Regions Science and Technology*, Vol. 111, pp. 67-79, 2015.
28. Zhang, Q. and R. Skjetne, "Image processing for identification of sea-ice floes and the floe size distributions." *IEEE Trans. Geoscience and Remote Sensing*, 53(5), pp. 2913-2924, 2015.
29. Zhang, Q., R. Skjetne, I. Metrikin, and S. Løset, "Image Processing for Ice Floe Analyses in Broken-ice Model Testing." *Cold Regions Science and Technology*, Vol. 111, pp. 27-38, 2015.
30. Skjetne, R., L. Imsland, and S. Løset, "The Arctic DP Research Project: Effective Stationkeeping in Ice." *Modeling, Identification & Control (MIC)*, 35(4), pp. 191-210, 2014.
31. Kjerstad, Ø.K. and R. Skjetne, "Modeling and Control for Dynamic Positioned Marine Vessels in Drifting Managed Sea Ice." *Modeling, Identification & Control (MIC)*, 35(4), pp. 249-262, 2014.
32. Norgren, P. and R. Skjetne, "Using Autonomous Underwater Vehicles as Sensor Platforms for Ice-Monitoring." *Modeling, Identification & Control (MIC)*, 35(4), pp. 263-277, 2014.
33. Zhang, Q. and R. Skjetne, "Image Techniques for Identifying Sea-Ice Parameters." *Modeling, Identification & Control (MIC)*, 35(4), pp. 293-301, 2014.
34. Zhao, B. and R. Skjetne, "A unified framework for fault detection and diagnosis using particle filter." *Modeling, Identification & Control (MIC)*, 35(4), 2014.
35. Su, B., R. Skjetne, and T.E. Berg, "Experimental and Numerical Investigation of a Double-Acting Offshore Vessel Performance in Level Ice." *Modeling, Identification & Control (MIC)*, 35(4), pp. 317-332, 2014.
36. Ruud, S. and R. Skjetne, "Verification and Examination Management of Complex Systems." *Modeling, Identification & Control (MIC)*, 35(4), 2014.
37. Su, B., R. Skjetne, and T.E. Berg, "Numerical assessment of a double-acting offshore vessel's performance in level ice with experimental comparison." *Cold Regions Science and Technology*, 106-107 (Oct.-Nov.), pp.96-109, 2014.
38. Zhao, B., R. Skjetne, M. Blanke, and F. Dukan, "Particle Filter for Fault Diagnosis and Robust Navigation of Underwater Robot," *IEEE Trans. Control Systems Technology*, 22(6), pp. 2399-2407, 2014.
39. Skjetne, R. and O. Egeland, "Hardware-in-the-loop testing of marine control systems." *Modeling, Identification & Control (MIC)*, 27(4), pp. 239-258, 2006.
40. Skjetne, R., T.I. Fossen, and P.V. Kokotovic, "Adaptive Maneuvering, with Experiments, for a Model Ship in a Marine Control Laboratory." *Automatica*, 41(2), pp. 289-298, 2005.
41. Skjetne, R., Ø.N. Smogeli, and T.I. Fossen, "A nonlinear ship maneuvering model: Identification and adaptive control with experiments for a model ship." *Modeling, Identification & Control (MIC)*, 25(1), pp. 3-27, 2004.
42. Skjetne, R., T.I. Fossen, and P.V. Kokotovic, "Robust Output Maneuvering for a Class of Nonlinear Systems." *Automatica*, 40(3), pp. 373-383, 2004.
43. Skjetne, R., "Ship Maneuvering: The past, the present and the future." *Sea Technology*, 44(3): 33-37, March, 2003.

International conference papers!

1. Bjørnø, J., M. Marley, and R. Skjetne, "Guidance model representing an ice field for path-planning in ice management." In proc. 39th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2020), Vol. 8 Polar and Arctic Sci and Tech. Online, Aug. 3-7, 2020.
2. Bjørnø, J., M. van den Berg, W. Lu, R. Skjetne, R. Lubbad, and S. Løset, "Quantifying Icebreaker Performance in Ice Management Operations by High-Fidelity Numerical Simulations." In proc. 30th Int. Ocean and Polar Eng. Conf. (ISOPE), pp. 824-830. Shanghai, China, Oct. 11-16, 2020.
3. Thyri, E. H., E. A. Basso, M. Breivik, K. Y. Pettersen, R. Skjetne, and A. M. Lekkas, "Reactive collision avoidance for ASVs based on control barrier functions". In proc. IEEE Conf. on Control Technology and Applications (CCTA), Montreal, Canada, pp. 380-387, Aug. 24-26, 2020.
4. Basso, E. A., E. H. Thyri, K. Y. Pettersen, M. Breivik, and R. Skjetne, "Safety-Critical Control of Autonomous Surface Vehicles in the Presence of Ocean Currents". In proc. IEEE Conf. on Control Technology and Applications (CCTA), Montreal, Canada, pp. 396-403, Aug. 24-26, 2020.
5. Park, D., M. K. Zadeh, and R. Skjetne, "DC-DC Converter Control for Peak-Shaving in Shipboard DC Power System via Hybrid Control." In proc. IEEE Conf. Industrial Electronics and Appl. (ICIEA), Kristiansand, Norway. Nov. 9-31, 2020.
6. Reddy, N. P., D. Pasdeloup, M. K. Zadeh, and R. Skjetne, "An Intelligent Power and Energy Management System for Fuel Cell/Battery Hybrid Electric Vehicle Using Reinforcement Learning." IEEE Transportation Electrification Conf. and Expo (ITEC), Detroit, USA. June 19-21, 2019.
7. Dahl, A. R., L. Thorat, and R. Skjetne, "Model Predictive Control of Marine Vessel Power System by Use of Structure Preserving Model." In proc. 11th IFAC Conf. Control Applications in Marine Systems (CAMS 2018), Opatija, Croatia, Sept. 10-12, 2018.
8. Ueland, E. S., R. Skjetne, and S. A. Vilsen, "Force Actuated Real-Time Hybrid Model Testing of a Moored Vessel: A Case Study Investigating Force Errors." In proc. 11th IFAC Conf. Control Applications in Marine Systems (CAMS 2018), Opatija, Croatia, Sept. 10-12, 2018.
9. Thorat, L. and R. Skjetne, "Optimal online configuration and load-sharing in a redundant electric power system for an offshore vessel using mixed-integer linear programming." In proc. 37th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2018), Vol. 1 Offshore Tech. Madrid, Spain, June 17-22, 2018.
10. Wu, Z., L. Thorat, and R. Skjetne, "Comparison of fuel consumption on a hybrid marine power plant with low-power versus high-power engines." In proc. 37th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2018), Vol. 1 Offshore Tech. Madrid, Spain, June 17-22, 2018.
11. Heyn, H.-M. and R. Skjetne, "Distributed sensing of loads acting against the hull of a stationkeeping vessel in ice." In proc. 37th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2018), Vol. 8 Polar and Arctic Science and Technology. Madrid, Spain, June 17-22, 2018.
12. Ren, Z., Z. Jiang, R. Skjetne, and Z. Gao, "Single Blade Installation Using Active Control of Three Tugger Lines." In proc. 28th Int. Ocean and Polar Eng. Conf. (ISOPE 2018), pp. 594-601. Sapporo, Hokkaido, Japan, June 10-15, 2018.
13. Jiang, Z., Z. Ren, Z. Gao, P. C. Sandvik, K. H. Halse, and R. Skjetne, "Mating Control of a Wind Turbine Tower-Nacelle-Rotor Assembly for a Catamaran Installation Vessel." In proc. 28th Int. Ocean and Polar Eng. Conf. (ISOPE 2018), pp.584-593. Sapporo, Hokkaido, Japan, June 10-15, 2018.
14. Ruud, S. K. and R. Skjetne, "Ice management and design philosophy." Proc. 13th Int. Marine Design Conf. (IMDC 2018), Helsinki, Finland, June, 2018.
15. Ueland, E. S. and R. Skjetne, "Effect of Time Delays and Sampling in Force Actuated Real-Time Hybrid Testing; A Case Study." MTS/IEEE OCEANS, Anchorage, Alaska, Sept. 18-21, 2017.
16. Heyn, H.-M., G. Udjus, and R. Skjetne, "Distributed acceleration sensing on ships." MTS/IEEE OCEANS, Anchorage, Alaska, Sept. 18-21, 2017.
17. Thorat, L. and R. Skjetne, "Load-dependent start-stop of gensets modeled as a hybrid dynamical system." In proc. 20th IFAC World Congress, Toulouse, France, July 9-14, 2017.
18. Skjetne, R., M. E. N. Sørensen, M. Breivik, S. A. T. Værnø, A. H. Brodtkorb, A. J. Sørensen, Ø. K. Kjerstad, V. Calabrò, and B. O. Vinje, "AMOS DP Research Cruise 2016: Academic full-scale testing of experimental dynamic positioning control algorithms onboard R/V Gunnerus." In proc. 36th Int.

- Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
19. Bjørnø, J., H.-M. Heyn, R. Skjetne, A. R. Dahl, and P. Frederich, "Modeling, parameter identification and thruster-assisted position mooring of C/S Inocean Cat I Drillship." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 20. Heyn, H.-M., M. Knoche, Q. Zhang, and R. Skjetne, "A system for automated vision-based sea-ice concentration detection and floe-size distribution indication from an icebreaker." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 21. Norgren, P. and R. Skjetne, "A particle filter SLAM approach to online iceberg drift estimation from an AUV." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 22. Dahl, A. R., R. Skjetne, and T. A. Johansen, "A structure preserving power system frequency model for dynamic positioning vessels." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 23. Ren, Z., R. Skjetne, and Z. Gao, "Modeling and control of crane overload protection during marine lifting operation based on model predictive control." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 24. Ueland, E. S., R. Skjetne, and A. R. Dahl, "Marine autonomous exploration using a Lidar and SLAM." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 25. Xu, J., Z. Ren, Y. Li, R. Skjetne, and K. H. Halse, "Dynamic simulation and control of an active roll reduction system using free-flooding tanks with vacuum pumps." In proc. 36th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2017), Trondheim, Norway, June 25-30, 2017.
 26. Lu, W., R. Lubbad, S. Løset, and R. Skjetne, "Parallel Channel Tests during Ice Management Operations in the Arctic Ocean." In proc. Arctic Technology Conference (ATC 2016), St. John's, Canada, Oct. 24-26, 2016.
 27. Lu, W., Q. Zhang, R. Lubbad, S. Løset, and R. Skjetne, "A Shipborne Measurement System to Acquire Sea Ice Thickness and Concentration at Engineering Scale." In proc. Arctic Technology Conference (ATC 2016), St. John's, Canada, Oct. 24-26, 2016.
 28. Ludvigsen, M., S. M. Albrektsen, K. Cisek, T. A. Johansen, P. Norgren, R. Skjetne, A. P. Zolich, P. S. Dias, S. Ferreira, J. B. Sousa, T. O. Fossum, Ø. Sture, T. R. Krogstad, Ø. Midtgaard, V. E. Hovstein, and E. Vågsholm, "Network of heterogeneous autonomous vehicles for marine research and management." In proc. MTS/IEEE OCEANS 2016, Monterey, USA, Sept. 19-23, 2016.
 29. Kjerstad, Ø. K., S. A. T. Værmø, and R. Skjetne, "A Robust Dynamic Positioning Tracking Control Law Mitigating Integral Windup." In proc. 10th IFAC Conf. Control Applications in Marine Systems (CAMS 2016), Trondheim, Norway, Sept. 13-16, 2016.
 30. Ren, Z. and R. Skjetne, "An On-site Current Profile Estimation Algorithm for a Moored Floating Structure." In proc. 10th IFAC Conf. Control Applications in Marine Systems (CAMS 2016), Trondheim, Norway, Sept. 13-16, 2016.
 31. Ren, Z. and R. Skjetne, "A Tension-based Position Estimation Solution of a Moored Structure and its Uncertain Anchor Positions." In proc. 10th IFAC Conf. Control Applications in Marine Systems (CAMS 2016), Trondheim, Norway, Sept. 13-16, 2016.
 32. Værmø, S. A. T., A. H. Brodtkorb, R. Skjetne, and A. J. Sørensen, "An Output Feedback Controller with Improved Transient Response of Marine Vessels in Dynamic Positioning." In proc. 10th IFAC Conf. Control Applications in Marine Systems (CAMS 2016), Trondheim, Norway, Sept. 13-16, 2016.
 33. Brodtkorb, A. H., S. A. T. Vernø, A. R. Teel, A. Sørensen, and R. Skjetne, "Hybrid observer for improved transient performance of a marine vessel in dynamic positioning." In proc. 10th IFAC Symp. Nonlinear Control Systems (NOLCOS 2016), Monterey, California, USA, Aug. 23-25, 2016.
 34. Heyn, H.-M. and R. Skjetne, "A system for measuring ice-induced accelerations and identifying ice actions on the CCGS Amundsen and a Swedish Atle-class icebreaker." In proc. 35th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2016), Busan, Korea, June 19-24, 2016.
 35. Candeloro, M., E. Valle, M. R. Miyazaki, R. Skjetne, M. Ludvigsen, and A. J. Sørensen (2015), "HMD as a new Tool for Telepresence in Underwater Operations and Closed-Loop Control of ROVs," in Proc. MTS/IEEE OCEANS, Washington DC, USA, Oct. 19-22, 2015.
 36. Ren, Z., R. Skjetne, and Kjerstad, Ø. K., "A Tension-based Position Estimation Approach for Moored Marine Vessels." In proc. 10th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC 2015), Copenhagen, Denmark, August 24-26, 2015.
 37. Ren, Z., R. Skjetne, and V. Hassani, "Supervisory Control of Line Breakage for Thruster-Assisted Position Mooring System." In proc. 10th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC 2015), Copenhagen, Denmark, August 24-26, 2015.
 38. Tuttren, S. A. and R. Skjetne, "Hybrid Control to Improve Transient Response of Integral Action in Dynamic Positioning of Marine Vessels." In proc. 10th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC 2015), Copenhagen, Denmark, August 24-26, 2015.
 39. Norgren, P. and R. Skjetne, "Line-of-sight iceberg edge-following using an AUV equipped with multibeam sonar." In proc. 10th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC 2015), Copenhagen, Denmark, August 24-26, 2015.
 40. Lubbad, R., S. Løset, and R. Skjetne, "Numerical Simulations Verifying Arctic Offshore Field Activities." In proc. 23rd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC'15), Trondheim, Norway, June 14-18, 2015.
 41. Norgren, P. and R. Skjetne, "Iceberg Detection and Edge-Following using AUV with Multibeam Sonar." In proc. 23rd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC'15), Trondheim, Norway, June 14-18, 2015.
 42. Kjerstad, Ø. K., I. Metrikin, and R. Skjetne, "Description and Numerical Simulations of Dynamic Positioning In Reversing Managed Ice." In proc. 23rd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC'15), Trondheim, Norway, June 14-18, 2015.
 43. Heyn, H.-H. and R. Skjetne, "Estimation of Forces caused by Ship-Ice Interaction using on-board Sensor Measurements." In proc. 23rd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC'15), Trondheim, Norway, June 14-18, 2015.
 44. Bø, T. I., T. A. Johansen, A. R. Dahl, M. R. Miyazaki, E. Pedersen, B. Rokseth, R. Skjetne, A. J. Sørensen, L. Thorat, I. B. Utne, K. K. Yum, and E. Mathiesen, "Real-Time Marine Vessel and Power Plant Simulation." In proc. 34th Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2015), St. John's, Newfoundland, Canada, May 31-June 5, 2015.
 45. Orsten, A., P. Norgren, and R. Skjetne (2014), "LOS guidance for towing an iceberg along a straight-line path." In proc. 22nd IAHR Int. Symp. on Ice, Singapore, August 11-15, 2014.
 46. Norgren, P., R. Lubbad, and R. Skjetne (2014), "Unmanned underwater vehicles in Arctic operations." In proc. 22nd IAHR Int. Symp. on Ice, Singapore, August 11-15, 2014.
 47. Veksler, A., T. A. Johansen, R. Skjetne, and E. Mathiesen (2014), "Reducing power transients in diesel-electric dynamically positioned ships using re-positioning." In proc. 40th Annual Conf. IEEE Industrial Electronics Society, 2014, Dallas, Texas, Oct 28-Nov 01, 2014.
 48. Jørgensen, U. and R. Skjetne (2013), "Real-time 3D Reconstruction of Underwater Sea-ice Topography by Observations from a Mobile Robot in the Arctic," in Proc. IFAC Conf. Control Applications Marine Systems., IFAC, Osaka, Japan, Sept. 2013.
 49. Skjetne, R. and Ø. K. Kjerstad (2013), "Recursive nullspace-based control allocation with strict prioritization for marine craft," in Proc. IFAC Conf. Control Applications Marine Systems., IFAC, Osaka, Japan, Sept. 2013.
 50. Chabaud, V., S. Steen, and R. Skjetne (2013), "Real-time hybrid testing for marine structures: Challenges and strategies". In proc. 32nd Int. Conf. Ocean, Offshore & Arctic Eng. (OMAE 2013), Nantes, France, June 09-14, 2013.
 51. Kjerstad, Ø. K., R. Skjetne, and B. O. Berge (2013), "Constrained nullspace-based thrust allocation for heading prioritized stationkeeping of offshore

- vessels in ice". In proc. 22nd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC 2013), Helsinki, Finland, June 09-13, 2013.
52. Su, B., Ø. K. Kjerstad, R. Skjetne, and T. E. Berg (2013), "Ice-going capability assessment and DP-Ice Capability Plot for a double acting intervention vessel in level ice". In proc. 22nd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC 2013), Helsinki, Finland, June 09-13, 2013.
 53. Zhang, Q., R. Skjetne, and B. Su (2013), "Automatic image segmentation for boundary detection of apparently connected sea-ice floes". In proc. 22nd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC 2013), Helsinki, Finland, June 09-13, 2013.
 54. Jørgensen, U. and R. Skjetne (2013), "Dynamic estimation of drifting ice topography over a 2D area using mobile underwater measurements". In proc. 22nd Int. Conf. Port & Ocean Eng. Arctic Conditions (POAC 2013), Helsinki, Finland, June 09-13, 2013.
 55. Veksler, A., T. A. Johansen, and R. Skjetne (2013), "Governor principles for increased safety on vessels with diesel-electric propulsion". In proc. 12th biannual European Control Conf. (ECC'13), Zurich, Switzerland, July 17-19, 2013.
 56. Scibilia, F. and R. Skjetne (2012), "Constrained Control Allocation for Vessels with Azimuth Thrusters". In proc. 9th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC), Arenzano, Italy, September 19-21, 2012.
 57. Zhao, B., M. Blanke, and R. Skjetne (2012), "Fault Tolerant ROV Navigation System Based on Particle Filter using Hydro-acoustic Position and Doppler Velocity Measurements". In proc. 9th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC), Arenzano, Italy, September 19-21, 2012.
 58. Veksler, A., T. A. Johansen, and R. Skjetne (2012), "Transient power control in dynamic positioning - governor feedforward and dynamic thrust allocation". In proc. 9th IFAC Conf. Manoeuvring and Control of Marine Craft (MCMC), Arenzano, Italy, September 19-21, 2012.
 59. Jørgensen, U. and R. Skjetne (2012), "Generating Safe and Equally Long Trajectories for Multiple Unmanned Vessels". In Proc. 20th Mediterranean Conference on Control and Automation (MED), Barcelona, Spain, July 3-6, 2012.
 60. Kjerstad, Ø. K. and R. Skjetne (2012), "Observer design with disturbance rejection by acceleration feedforward". In proc. 7th IFAC Symp. Robust Control Design (Rocond'12), Aalborg, Denmark, June 2012.
 61. Kjerstad, Ø. K. and R. Skjetne (2012), "Feedforward linearization and disturbance rejection of mechanical systems using acceleration measurements," In proc. 7th IFAC Symp. Robust Control Design (Rocond'12), Aalborg, Denmark, June 2012.
 62. Scibilia, F., U. Jørgensen, and R. Skjetne (2012), "AUV Guidance System for Dynamic Trajectory Generation". In proc. IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV'2012), Porto, Portugal, April 10-12, 2012.
 63. Scibilia, F., U. Jørgensen, and R. Skjetne (2012). "AUV Guidance System for Subsurface Ice Intelligence". In Proc. 31st International Conference on Ocean, Offshore and Arctic Engineering (OMAE), Rio de Janeiro, Brazil, July 1-6, 2012.
 64. Zhang, Q., R. Skjetne, S. Løset, and A. Marchenko (2012), "Digital image processing for sea ice observations in support to Arctic DP operations". In proc. 31st Int. Conf. Ocean, Offshore and Arctic Eng. (OMAE 2012), Rio de Janeiro, Brazil, July 1-6, 2012.
 65. Zhang, Q., S. van der Werff, I. Metrikin, S. Løset, and R. Skjetne (2012), "Image processing for the analysis of an evolving broken-ice field in model testing". In proc. 31st Int. Conf. Ocean, Offshore Arctic Eng. (OMAE 2012), Rio de Janeiro, July, 2012.
 66. Jørgensen, U. and Skjetne, R. (2012), "Dynamic Estimation of Drifting Ice Topography Using Underwater Mobile Measurements," in Proc. American Control Conf., AACC, Montréal, Canada, June 2012.
 67. Zhao, B., Blanke, M., and Skjetne, R. (2012), "Particle Filter ROV Navigation using Hydroacoustic Position and Speed Log Measurements," in Proc. American Control Conf., AACC, Montréal, Canada, June 2012.
 68. Veksler, A., Johansen, T. A., and Skjetne, R. (2012), "Thrust allocation with power management functionality on dynamically positioned vessels," in Proc. American Control Conf., AACC, Montréal, Canada, June 2012.
 69. Skjetne, R., Jørgensen, U., and Teel, A.R. (2011), "Line-of-sight path-following along regularly parametrized curves solved as a generic maneuvering problem," in Proc. IEEE Conf. Decision & Control, IEEE, Orlando, USA, Dec. 2011.
 70. Thorvaldsen, C. F. L. and Skjetne, R. (2011), "Formation control of fully-actuated marine vessels using group agreement protocols," in Proc. IEEE Conf. Decision & Control, IEEE, Orlando, USA, Dec. 2011.
 71. Kjerstad, Ø. K., Skjetne, R., and Jenssen, N. A. (2011), "Disturbance rejection in dynamic systems by use of acceleration feedforward: Application to dynamic positioning," in Proc. 18th IFAC World Congress, Milano, Italy, Aug.–Sept. 2011.
 72. Haugen, J., Imsland, L., Løset, S., and Skjetne, R. (2011), "Ice Observer System for Ice Management Operations," in Proc. 21st Int. Offshore (Ocean) and Polar Engineering Conf. (ISOPE-2011), Maui, Hawaii, USA, June 2011.
 73. Skjetne, R., and Egeland, O. (2005), "Hardware-in-the-loop testing of marine control systems," in Proc. 46th Conf. Simulation and Modeling (SIMS), Trondheim, Norway, Oct. 2005.
 74. Skjetne, R., and Egeland, O. (2005), "Hardware-In-the-Loop Simulation for Testing of DP Vessels," Int. Conf. Technology and Operation of Offshore Support Vessels (OSV), Singapore, Sept. 2005.
 75. Ihle, I.-A.F.; Skjetne, R.; Fossen, T.I. (2005); "Output feedback control for maneuvering systems using observer backstepping," in Proc. 2005 IEEE Int. Symp. Intel. Contr. (ISIC) & 13th Mediterr. Conf. Contr. Autom. (MED), pp.1512-1517, Cyprus, June 2005.
 76. Ihle, I.-A. F., Skjetne, R., and Fossen, T. I. (2004), "Nonlinear formation control of marine craft with experimental results," in Proc. IEEE Conf. Decision & Control, IEEE, Paradise Island, Bahamas, Dec. 2004.
 77. Skjetne, R., Smogeli, Ø., and Fossen, T. I. (2004), "Modeling, identification, and adaptive maneuvering of CyberShip II: A complete design with experiments," in Proc. IFAC Conf. Control Applications Marine Systems., IFAC, Ancona, Italy, July 2004.
 78. Skjetne, R. and Teel, A. R. (2004), "Maneuvering dynamical systems by sliding-mode control," in Proc. American Control Conf., AACC, Boston, USA, June 2004. (Best student speaker award at conference session).
 79. Skjetne, R. and Fossen, T. I. (2004), "On integral control in backstepping: Analysis of different techniques," in Proc. American Control Conf., AACC, Boston, USA, June 2004.
 80. Johansen, V., Skjetne, R., and Sørensen, A. J. (2003), "Maneuvering of Towed Interconnected Marine Systems," in Proc. 6th IFAC Conf. Manoeuvring and Control of Marine Crafts, Girona, Spain, Sept. 2003.
 81. Fossen, T. I., Breivik, M., and Skjetne, R. (2003), "Line-of-Sight Path Following of Underactuated Marine Craft," in Proc. 6th IFAC Conf. Manoeuvring and Control of Marine Crafts, Girona, Spain, Sept. 2003.
 82. Skjetne, R., Ihle, I.-A. F., and Fossen, T. I. (2003), "Formation Control by Synchronizing Multiple Maneuvering Systems," in Proc. 6th IFAC Conf. Manoeuvring and Control of Marine Crafts, Girona, Spain, Sept. 2003.
 83. Skjetne, R., Moi, S., and Fossen, T. I. (2002), "Nonlinear Formation Control of Marine Craft," in Proc. 41st IEEE Conf. Decision and Control, pp. 3926-3931, Las Vegas, NV, USA, Dec. 2002.
 84. Skjetne, R., Teel, A. R., and Kokotovic, P. V. (2002), "Nonlinear Maneuvering with Gradient Optimization," in Proc. 41st IEEE Conf. Decision and Control, pp. 3926-3931, Las Vegas, NV, USA, Dec. 2002.
 85. Skjetne, R., Teel, A. R., and Kokotovic, P. V. (2002), "Stabilization of Sets Parametrized by a Single Variable: Application to Ship Maneuvering," in Proc.

15th Int. Symp. Mathematical Theory of Networks and Systems, Notre Dame, IN, USA, Aug. 2002.

86. Fossen, T. I., Lindegaard, K. P., and Skjetne, R. (2002), "Inertia Shaping Techniques for Marine Vessels Using Acceleration Feedback," in Proc. 15th IFAC World Congress Automatic Control, Barcelona, Spain, July 2002.
87. Skjetne, R., Fossen, T. I., and Kokotovic, P. (2003), "Output Maneuvering for a Class of Nonlinear Systems," in Proc. 15th IFAC World Congress Automatic Control, Barcelona, Spain, July 2002.
88. Skjetne, R. and Fossen, T. I. (2001), "Nonlinear Maneuvering and Control of Ships," in Proc. MTS/IEEE OCEANS, pp. 1808-1815, Honolulu, Hawaii, Nov. 2001.
89. Skjetne, R. and Shim, H. (2001), "A systematic nonlinear observer design for a class of Euler-Lagrange systems," in Proc 9th Mediterranean Conf. Control and Automation (Med'01), Dubrovnik, Croatia, June 2001.

Other dissemination activities!

1. Guest lecture at Center for Control, Dynamical systems, and Computation (CCDC), "Control and Estimation for Effective Stationkeeping Operations in Sea-ice", University of California at Santa Barbara, USA, Nov. 3, 2017.
2. Pres. Tekna DP og forankring av offshore installasjoner 2015, "Design and Verification of Control Systems for Safe and Energy-efficient Vessels with Hybrid Power Plants", Trondheim, Feb. 11-12, 2015. Presentation together with Torstein I. Bø.
3. Pres. SAMCoT Scientific seminar, "Overview WP5 – Ice Management and Design Philosophy", Trondheim, May 7, 2015.
4. Pres. NTNU Oceans Week, AUR-Lab workshop, "NEPTUNUS - a student project to design a consumer grade mini-ROV", Trondheim, May 6, 2015.
5. Pres. Kvaerner Concrete Solution Ice workshop, "Ice survey and surveillance for Arctic offshore operations: Development of the AUV technology for use for ice survey", Oslo, March 4, 2015.
6. Pres. AMOS Oppdal Workshop, "Highlights of the Skjetne Research Group", Oppdal, Feb. 9, 2015.
7. Guest lecture at Seoul National Univ., "Part 1: The Maneuvering Control Problem; Part 2: Control and Estimation for Effective Stationkeeping Operations in Sea-ice", Seoul, Oct. 30, 2014.
8. Pres. NFA Servomøtet 2014, "Dynamic positioning in ice for offshore vessels: Results from the Arctic DP Project", Kongsberg, Oct. 22-23, 2014.
9. Lecture at MARINTEK-skolen, "Topics in marine control engineering by Professor Roger Skjetne", Trondheim, Sept. 25, 2014.
10. Pres. NTNU AUR-Lab workshop, "Recursive nullspace-based control allocation with strict prioritization for marine craft", Trondheim, Mar. 3-4, 2014.
11. Plenary lecture on "Dynamisk posisjonering i is", Marintekniske Dager 2013, MTS, Trondheim, Oct. 10-11, 2013.
12. Lecture at BEST seminar on Arctic marine technology, "Control strategies for effective stationkeeping in ice", Trondheim, Sept. 18, 2013.
13. Lecture at CeSOS Highlights and AMOS Visions Conference, "Designing for effective stationkeeping in ice", Trondheim, May 27-29, 2013.
14. Lecture at Tekna Kursdagene: Oil and gas production in a cold climate, "Control strategies for effective stationkeeping in ice", Trondheim, Jan. 8, 2013.
15. Pres. NFA Servomøtet 2011, "Control strategies for stationkeeping in ice", Trondheim, Oct. 19-20, 2011.
16. Lecture at Statoil Research Summit, Seminar on Arctic Marine Operations, "Control strategies for stationkeeping in ice", Trondheim, Sept. 28-29, 2011.
17. Pres. NFA Servomøtet 2010, "Udfordringer med kraftproduksjon og kraftkonsumering ombord i fartøy", Ålesund, Oct. 20-21, 2010.