Research outputs:

**Ice condition assessment using onboard accelerometers and statistical change detection**
Research output: Research - peer-review » Journal article – Annual report year: 2019

**Adaptive Observer for Nonlinearly Parameterised Hammerstein System with Sensor Delay – Applied to Ship Emissions Reduction**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Condition monitoring of spar-type floating wind turbine drivetrain using statistical fault diagnosis**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Constrained Multi-Body Dynamics for Modular Underwater Robots — Theory and Experiments**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Cooperative Rendezvous and Docking for Underwater Robots Using Model Predictive Control and Dual Decomposition**
Research output: Research - peer-review » Article in proceedings – Annual report year: 2018

**Fault Detection and Isolation in Linear Heterogeneous Multi-Agent Networks**
Research output: Research - peer-review » Conference article – Annual report year: 2018

**Fault Diagnosis for Satellite Sensors and Actuators using Nonlinear Geometric Approach and Adaptive Observers**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Fault Tolerant Position-mooring Control for Offshore Vessels**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Friction-resilient position control for machine tools—Adaptive and sliding-mode methods compared**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Marine Diesel Engine Control to meet Emission Requirements and Maintain Maneuverability**
Research output: Research - peer-review » Journal article – Annual report year: 2018

**Method for determining a deadzone angle of a backlash in a mechanical drive-train system, method for controlling a drive motor controller as well as drive-train system**
On the joint distribution of excursion duration and amplitude of a narrow-band Gaussian process
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Model-based plant-wide optimization of large-scale lignocellulosic bioethanol plants.
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Performance Comparison of Controllers with Fault-Dependent Control Allocation for UAVs
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Nonlinear Adaptive Control of Exhaust Gas Recirculation for Large Diesel Engines
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Wind turbine inverter robust loop-shaping control subject to grid interaction effects
Research output: Research - peer-review › Journal article – Annual report year: 2015

A Framework for Diagnosis of Critical Faults in Unmanned Aerial Vehicles
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

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Research output: Research - peer-review › Journal article – Annual report year: 2014
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Stabiliser Fault Emergency Control using Reconfiguration to Preserve Power System Stability
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Call for Papers: ‘Adaptive methods and signal processing for marine systems’
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Control Surface Fault Diagnosis with Specified Detection Probability - Real Event Experiences
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Early Detection of Parametric Roll Resonance on Container Ships
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Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Modelling and L1 Adaptive Control of Temperature in Biomass Pretreatment
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Modelling for Control of Exhaust Gas Recirculation on Large Diesel Engines
Observer Backstepping Control for Variable Speed Wind Turbine
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Research output: Research - peer-review › Journal article – Annual report year: 1996

Uncertainty Models for Rudder-Roll Damping Control
Blanke, M. 1996 IFAC World Congress. p. 285-290
Research output: Research - peer-review › Article in proceedings – Annual report year: 1996

Fault Detection for A Diesel Engine Actuator - A Benchmark for FDI
Blanke, M., Bøgh, S. A., Jørgensen, R. B. & Paton, R. J. 1995 In : Control Engineering Practice. 3, 12, p. 1731-1740
Research output: Research - peer-review › Journal article – Annual report year: 1995

Identification of a Class of Non-linear State Space Models using RPE Techniques
Research output: Research - peer-review › Journal article – Annual report year: 1989

Identification of a class of nonlinear state-space models using RPE techniques
Research output: Research - peer-review › Article in proceedings – Annual report year: 1986

The Impact of Analog and Bang-Bang Steering Gear Control on Ship's Fuel Economy
Research output: Research - peer-review › Article in proceedings – Annual report year: 1982

Projects:
ASAN: Autonomous Situation Awareness for Navigation
Blanke, M., Hansen, S., Papageorgiou, D. & Stets, J. D.
01/12/2018 → 31/03/2021
Project: Research

ShippingLab - Autonomy
Blanke, M., Galeazzi, R. & Hansen, S.
01/04/2019 → 31/03/2022
Project: Research

Electronic Outlook
Blanke, M. & Hansen, S.
15/10/2017 → 28/02/2019
Project: Research

Fælledesign og fejladføring til autonome fly
Hansen, S., Blanke, M., Adrian, J., Niemann, H. H., Gustafsson, F. & Henry, D.
Ansat eksternt
01/06/2009 → 21/02/2013
Project: PhD

Design and Implementation of Automatic Ckoadøl in High Efficiency Tractors for Agricultural Applications
Christensen, R. H., Santos, I., Klit, P., Blanke, M., Keogh, P. S. & Nordmann, R.
DTU-lønnet stipendie
01/09/2001 → 11/02/2005
Project: PhD

Data-driven Condition Monitoring of Switches and Crossings
Barkhordari, P., Galeazzi, R. & Blanke, M.
Forskningsrådssfinsiering
01/06/2016 → 31/05/2019
Project: PhD

Fault-tolerance and reconfiguration for collaborating heterogeneous underwater robots
Nielsen, M. C., Blanke, M., Christensen, D. J. & Schjølberg, I.
Stipendie fra udlandet
15/08/2014 → 06/06/2018
Project: PhD

high Accuracy Nonlinear Control anhs Estimation for Machine Tool Systems
Eksternt finansieret virksomhed
15/08/2014 → 11/10/2017
Project: PhD

Modular Robotics for Underwater Environments
Furno, L., Blanke, M., Christensen, D. J., Niemann, H. H., Ludvigsen, M. & Schultz, U. P.
Technical University of Denmark
15/12/2013 → 14/03/2017
Project: PhD

Direct vision based molten pool feature extraction in automated arc welding
Liu, J., Fan, Z., Christensen, K. H., Klæstrup Kristensen, J., Olsen, S. I., Blanke, M., Lucas, W. & Sporring, J.
ErhvervsPhD-ordningen VTU
01/07/2008 → 25/01/2012
Project: PhD
Automated Design of Advanced Mechatronic Systems
Dupuis, J., Fan, Z., Goodman, E., Sigmund, O., Blanke, M., Jin, Y. & Zhang, Q.
Forskningsrådsfinansiering
15/05/2007 → 11/05/2011
Project: PhD

Analyse af ruteoptimeringssystemer for skibe
Andersen, N. A. & Blanke, M.
Gammel ordning u/skema-SU
01/08/1982 → 04/09/1996
Project: PhD

Navigation
Larsen, M. B., Andersen, N. A., Lind, M., Blanke, M., Holst, J. & Pascoal, A. M.
Forskningsrådsstip.-SU, Eksp
01/03/1997 → 04/12/2002
Project: PhD

Real-Time 'Plant-Wide' Diagnosis
Petersen, J., Lind, M. & Blanke, M.
Forskningsrådsstip.-SU, Eksp
01/05/1997 → 27/03/2000
Project: PhD

Menneske-maskine samarbejde i distribuerede automatiseringssystemer
Olsen, M. H., Lind, M., Ravn, O., Rose, M., Blanke, M., Johnsen, T. & Andersen, P. B.
DTU, Samfinansiering
01/07/2003 → 30/03/2007
Project: PhD

Experimental Contribution to the Problem of Model Parameter Identification in Rotating Machines via Active Magnetic Bearings
Kjølhede, K. K., Santos, I., Braun, M. J., Blanke, M. & Dmochowski, W. M.
DTU-lønnet stipendie
01/02/2004 → 11/04/2008
Project: PhD

Exhaust Recirculation Control for Reduction of NOx from Large Two-stroke Diesel Engines
Nielsen, K. V., Blanke, M., Galeazzi, R., Eriksson, L., Svendsen, C. H., Johansen, T. A. & Theotokatos, G.
Industrial PhD
01/09/2013 → 12/04/2017
Project: PhD

Performance Monitoring, Diagnosis and Advanced Control for Bio-Refinery
ErhvervsPhD-ordningen VTU
01/04/2012 → 17/02/2016
Project: PhD

Fault-tolerant Guidance for Precision Farming using 2D/3D Vision and Computer-Based Learning
Blas, M. R., Blanke, M., Madsen, T. E., Lind, M., Christensen, H. I., Schilling, K. & Madsen, T. E.
ErhvervsPhD-ordningen VTU
01/09/2006 → 30/06/2010
Project: PhD

Robotic Manipulation of Offshore Drilling Equipment
Choux, M., Blanke, M., Poulsen, N. K., Andersen, T. O., Egeland, O. & Hovland, G.
Stipendie fra udlandet
Autonomous Supervision and Control to Prevent Parametric Resonance
Galeazzi, R., Blanke, M., Jensen, J. J., Santos, I., Kinnaert, M. & Nijmeijer, H.
DTU-lønnet stipendie
01/08/2006 → 03/03/2010
Project: PhD

Fault Diagnosis for Identification of Deviant Behavior
Jónsson, R. I., Blanke, M., Højsgaard, S., Poulsen, N. K., Gustafsson, F., Mol, R. M. D. & Madsen, H.
DTU, Samfinansiering
01/04/2007 → 22/06/2011
Project: PhD

Nonlinear Methods for Spacecraft Orbit Control using an Electrodynamic Tether
Larsen, M. B., Blanke, M., Santos, I., Ortega, R. & Wisniewski, R.
DTU-lønnet stipendie
01/05/2007 → 30/09/2010
Project: PhD

Offshore Wind Park Control Assessment Methodologies to Assure Robustness and Fault tolerance
ErhvervsPhD-ordningen VTU
01/09/2012 → 24/05/2013
Project: PhD

Power Management for Refrigeration Systems
ErhvervsPhD-ordningen VTU
01/04/2010 → 20/01/2016
Project: PhD

Multiphysics approach applied to the design of AMB for high speed turbomachinery
Lauridsen, J. S., Santos, I., Schlee, M., Blanke, M., Maslen, E. H. & Keogh, P. S.
Samfinansierede - Virksomhed
01/12/2013 → 30/09/2017
Project: PhD

Emergency Control in Power Transmission
Pedersen, A. S., Blanke, M., Jóhannsson, H., TabatabaeiPour, M., Niemann, H. H., Erlich, I. & Stoustrup, J.
Technical University of Denmark
01/11/2012 → 20/01/2016
Project: PhD

INTELLISWITCH: Intelligent Quality Assessment of Railway Switches and Crossings
Innovationsfonden
01/03/2015 → 28/02/2019
Project: Research

Fault-Tolerant Control with Coarse Models in industrial Application
Papageorgiou, D., Blanke, M. & Niemann, H. H.
15/08/2014 → 15/08/2017
Project: Research
SOSPO: Secure Operation of Sustainable Power Systems
01/01/2012 → 31/03/2016
Project: Research

Fault-tolerant control for complex systems
Blanke, M., Åström, K. J., Schaufelberfer, W., Albertos, P., Zang, Z. & Zamanabadi, R.
01/01/2000 → 01/01/9999
Project: Research

Dynamics and control of thrusters for ships and underwater vehicles
Blanke, M., Fossen, T. I. & Lindegaard, P.
01/01/2000 → 01/01/9999
Project: Research

Ultrasound actuator for aerospace applications
Blanke, M., Helbo, J. & Andersen, B.
01/01/2000 → 01/01/9999
Project: Research

Activities:

Automation and Control (Organisational unit)
Blanke, M. (Chairman)
15 Sep 2018 → 15 Oct 2018
Activity: Membership › Membership in review committee

Department of Mechanical Engineering (Organisational unit)
Blanke, M. (Chairman)
1 Jul 2017 → 26 Sep 2017
Activity: Membership › Membership in review committee

Linköping University (External organisation)
Blanke, M. (Member)
1 Feb 2017 → 8 Mar 2017
Activity: Membership › Membership in review committee

Professorship evaluation (External organisation)
Blanke, M. (Participant)
15 Oct 2016 → 15 Dec 2016
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

International Journal of Adaptive Control and Signal Processing (Journal)
Blanke, M. (Reviewer)
1 Oct 2015 → 1 May 2017
Activity: Research › Journal editor

10th IFAC Conference on Manoeuvring and Control of Marine Craft
Blanke, M. (Organizer)
24 Aug 2015
Activity: Attending an event › Participating in or organising a conference
Linköping University (External organisation)
Blanke, M. (Participant)
22 May 2015
Activity: Membership › Membership in review committee

Norwegian University of Science and Technology (External organisation)
Blanke, M. (Participant)
1 May 2015 → 30 Jun 2015
Activity: Membership › Membership in review committee

University of Cambridge (External organisation)
Blanke, M. (Participant)
25 Jan 2015 → 6 Feb 2015
Activity: Membership › Membership in review committee

University of Bordeaux (External organisation)
Blanke, M. (Participant)
19 Nov 2014
Activity: Membership › Membership in review committee

Aarhus University (External organisation)
Blanke, M. (Participant)
12 Nov 2014
Activity: Membership › Membership in review committee

University of Cambridge (External organisation)
Blanke, M. (Participant)
3 Nov 2014
Activity: Membership › Membership in review committee

Linköping University (External organisation)
Blanke, M. (Participant)
25 Apr 2014
Activity: Membership › Membership in review committee

Queensland University of Technology (External organisation)
Blanke, M. (Participant)
28 Jan 2014 → 10 Feb 2014
Activity: Membership › Membership in review committee

International Journal of Adaptive Control and Signal Processing (Journal)
Blanke, M. (Editor)
1 Jan 2014 → 1 May 2015
Activity: Research › Journal editor

IFAC Technical Committee on Marine Systems (External organisation)
Blanke, M. (Participant)
2014 → 2017
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Aalborg University (External organisation)
Blanke, M. (Participant)
5 Oct 2012 → 18 Dec 2012
Activity: Membership › Membership in review committee
Linköping University (External organisation)
Blanke, M. (Participant)
15 Jun 2012
Activity: Membership › Membership in review committee

Aalborg University (External organisation)
Blanke, M. (Participant)
21 Mar 2012
Activity: Membership › Membership in review committee

Linköping University (External organisation)
Blanke, M. (Participant)
28 Dec 2011 → 1 Mar 2012
Activity: Membership › Membership in review committee

Member IFAC Technical Committee on Marine Systems (External organisation)
Blanke, M. (Participant)
2011 → 2014
Activity: Membership › Membership of commitees, commissions, boards, councils, associations, organisations, or similar

Control Engineering Practice (Journal)
Blanke, M. (Reviewer)
Oct 2008 → …
Activity: Research › Journal editor

IEEE Transactions on Aerospace and Electronic Systems (Journal)
Blanke, M. (Editor)
Oct 2007 → Dec 2016
Activity: Research › Journal editor

IEEE Transactions on Aerospace and Electronic Systems (Journal)
Blanke, M. (Editor)
Oct 2007 → Dec 2016
Activity: Research › Journal editor

Prizes:

ASME DSCD Rudolf Kalman Best Paper Award
Kræn Vodder Busk (Recipient), Mogens Blanke (Recipient), Lars Eriksson (Recipient) & Morten Veilgaard-Laursen (Recipient), 2 Oct 2018
Prize: Prizes, scholarships, distinctions