Research outputs:

**Possible power of down-regulated offshore wind power plants**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**An automated meal detector and bolus calculator in combination with closed-loop blood glucose control**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Adaptive model predictive control for a dual-hormone artificial pancreas**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Ancillary Services 4.0: A Top-To-Bottom Control-Based Approach for Solving Ancillary Services Problems in Smart Grids**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Closed loop identification of a piezoelectrically controlled radial gas bearing: Theory and experiment**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Consumers’ Flexibility Estimation at the TSO Level for Balancing Services**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Detector design for active fault diagnosis in closed-loop systems**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Estimating the Density of Fluid in a Pipeline System with an Electropump**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Modelling of fasting glucose-insulin dynamics from sparse data**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Modelling of glucose-insulin dynamics from low sampled data**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Overnight glucose control in people with type 1 diabetes**
Research output: Research - peer-review › Journal article – Annual report year: 2018
Physical-stochastic (greybox) modeling of slugging
Research output: Research - peer-review › Journal article – Annual report year: 2018

Sensor-based detection and estimation of meal carbohydrates for people with diabetes
Research output: Research - peer-review › Journal article – Annual report year: 2018

Utilizing flexibility resources in the future power system operation: Alternative approaches
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Verification of Real-Time Optimization for Multi-stage Spray Dryer Operation with Polynomial Optimization
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Condition monitoring of a rotor arrangement in particular a wind turbine
Research output: Research › Patent – Annual report year: 2017

Adaptive control in an artificial pancreas for people with type 1 diabetes
Research output: Research - peer-review › Journal article – Annual report year: 2016

Adaptive Unscented Kalman Filter using Maximum Likelihood Estimation
Research output: Research - peer-review › Conference article – Annual report year: 2017

An Adaptive Nonlinear Basal-Bolus Calculator for Patients With Type 1 Diabetes
Research output: Research - peer-review › Journal article – Annual report year: 2016

An experimentally validated simulation model for a four-stage spray dryer
Research output: Research - peer-review › Journal article – Annual report year: 2017

Comparison of three control strategies for optimization of spray dryer operation
Research output: Research - peer-review › Journal article – Annual report year: 2017

Developing a simulation framework for safe and optimal trajectories considering drivers’ driving style
Research output: Research - peer-review › Journal article – Annual report year: 2017

Fault and meal detection by redundant continuous glucose monitors and the unscented Kalman filter
Research output: Research - peer-review › Journal article – Annual report year: 2017

Fault diagnosis and condition monitoring of wind turbines
Research output: Research - peer-review › Journal article – Annual report year: 2018

Active Fault Detection Based on a Statistical Test
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

An Ensemble Nonlinear Model Predictive Control Algorithm in an Artificial Pancreas for People with Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Application of the Continuous-Discrete Extended Kalman Filter for Fault Detection in Continuous Glucose Monitors for Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016
Comparison of Three Nonlinear Filters for Fault Detection in Continuous Glucose Monitors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Diagnosis of wind turbine rotor system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Distributed Model Predictive Control for Smart Energy Systems
Research output: Research - peer-review › Journal article – Annual report year: 2016

Economic Model Predictive Control for Spray Drying Plants

Economic MPC for a linear stochastic system of energy units
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Enhanced Subsea Acoustically Aided Inertial Navigation

Industrial application of model predictive control to a milk powder spray drying plant
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Methods and Algorithms for Economic MPC in Power Production Planning

Model Identification using Continuous Glucose Monitoring Data for Type 1 Diabetes
Research output: Research - peer-review › Conference article – Annual report year: 2016

Model Predictive Control of Sewer Networks
Research output: Research - peer-review › Conference article – Annual report year: 2017

MPC control of water supply networks
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

On the significance of the noise model for the performance of a linear MPC in closed-loop operation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

A Bolus Calculator Based on Continuous-Discrete Unscented Kalman Filtering for Type 1 Diabetics
Research output: Research - peer-review › Conference article – Annual report year: 2015

A Continuous-Discrete Extended Kalman Filter for State and Parameter Estimation in People with Type 1 Diabetes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Active Fault Diagnosis in Sampled-data Systems
Research output: Research - peer-review › Conference article – Annual report year: 2015

Adaptive Backstepping Control of Lightweight Tower Wind Turbine
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

A smart rotor configuration with linear quadratic control of adaptive trailing edge flaps for active load alleviation
Research output: Research - peer-review › Journal article – Annual report year: 2014
Adaptive Passivity Based Individual Pitch Control for Wind Turbines in the Full Load Region
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Application of Constrained Linear MPC to a Spray Dryer
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

A Reduced Dantzig-Wolfe Decomposition for a Suboptimal Linear MPC
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Assessment of Model Predictive and Adaptive Glucose Control Strategies for People with Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Bihormonal model predictive control of blood glucose in people with type 1 diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Controller modification applied for active fault detection
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Economic Optimization of Spray Dryer Operation using Nonlinear Model Predictive Control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Estimation of the Possible Power of a Wind Farm
Research output: Research - peer-review › Conference article – Annual report year: 2014

Full-scale test of trailing edge flaps on a Vestas V27 wind turbine: active load reduction and system identification
Research output: Research - peer-review › Journal article – Annual report year: 2013

IMU Calibration and Validation in a Factory, Remote on Land and at Sea
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Model based active power control of a wind turbine
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Model Predictive Control for Smart Energy Systems
Research output: Research › Ph.D. thesis – Annual report year: 2014

Wind Speed Estimation and Parameterization of Wake Models for Downregulated Offshore Wind Farms
Research output: Research - peer-review › Poster – Annual report year: 2014

Wind Speed Estimation and Parametrization of Wake Models for Downregulated Offshore Wind Farms within the scope of PossPOW Project
Research output: Research - peer-review › Conference article – Annual report year: 2014

A Grey-Box Model for Spray Drying Plants
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

An MPC approach to individual pitch control of wind turbines using uncertain LIDAR measurements
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013
A simplified dynamic inflow model and its effect on the performance of free mean wind speed estimation
Research output: Research - peer-review › Journal article – Annual report year: 2013

Computational Efficiency of Economic MPC for Power Systems Operation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Decentralized Large-Scale Power Balancing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Early Detection of Parametric Roll Resonance on Container Ships
Research output: Research - peer-review › Journal article – Annual report year: 2012

Early Termination of Dantzig-Wolfe Algorithm for Economic MPC
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Frequency-Weighted Model Predictive Control of Trailing Edge Flaps on a Wind Turbine Blade
Research output: Research - peer-review › Journal article – Annual report year: 2013

Frequency weighted model predictive control of wind turbine
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Model-Based Closed-Loop Glucose Control in Type 1 Diabetes: The DiaCon Experience
Research output: Research - peer-review › Journal article – Annual report year: 2013

Model Predictive Control of Wind Turbines using Uncertain LIDAR Measurements
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

PossPOW: possible Power of Downregulated Offshore Wind Power Plants
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

POSSPOW: Possible Power of Offshore Wind Power Plants
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

The Potential of Economic Model Predictive Control for Spray Drying Plants
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Thermal Storage Power Balancing with Model Predictive Control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

A Dantzig-Wolfe Decomposition Algorithm for Linear Economic MPC of a Power Plant Portfolio
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Beyond the CP-curve in Model-based Control of Wind Turbines
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012
Stochastic Model Predictive Control with Applications in Smart Energy Systems
Research output: Research - peer-review » Conference abstract in proceedings – Annual report year: 2012

Tuning of Controller for Type 1 Diabetes Treatment with Stochastic Differential Equations
Research output: Research - peer-review » Article in proceedings – Annual report year: 2012

Tuning SISO offset-free Model Predictive Control based on ARX models
Research output: Research - peer-review » Journal article – Annual report year: 2012

Wind turbine control with constraint handling: a model predictive control approach
Research output: Research - peer-review » Journal article – Annual report year: 2012

Adaptive Disturbance Estimation for Offset-Free SISO Model Predictive Control
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

A Design Algorithm using External Perturbation to Improve Iterative Feedback Tuning Convergence
Research output: Research - peer-review » Journal article – Annual report year: 2011

A μ-Synthesis Approach to Robust Control of a Wind Turbine
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Closed-Loop and Semi Closed-Loop Strategies for Control of Blood Glucose in People with Type 1 Diabetes
Research output: Research » Poster – Annual report year: 2011

Constraint Handling within a Multi-blade Coordinate Framework of a Wind Turbine
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Detecting asymmetries in the rotor of a wind turbine using the multi-blade coordinate transformation
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Detection of Oestrus and Lameness in Dairy Cows
Research output: Research » Ph.D. thesis – Annual report year: 2011

DK-iteration robust control design of a wind turbine
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

H∞ Control of a Wind Turbine
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Insulin Administration for People with Type 1 diabetes
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Model predictive control of trailing edge flaps on a wind turbine blade
Research output: Research » Ph.D. thesis – Annual report year: 2012

Model Predictive Control of Trailing Edge Flaps on a wind turbine blade
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011

Noise Modelling and MPC Tuning for Systems with Infrequent Step Disturbances
Research output: Research - peer-review » Article in proceedings – Annual report year: 2011
Noise Modelling and MPC Tuning for Systems with Infrequent Step Disturbances
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Nonlinear Model Predictive Control of a Simplified Wind Turbine
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Oestrus Detection in Dairy Cows from Activity and Lying Data using on-line Individual Models
Research output: Research - peer-review › Journal article – Annual report year: 2011

Orchard navigation using derivative free Kalman filtering
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Pre-Trained Neural Networks used for Non-Linear State Estimation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Robust stability in constrained predictive control through the Youla parameterisations
Research output: Research - peer-review › Journal article – Annual report year: 2011

Strategies for glucose control in people with type 1 diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Systematic identification and robust control design for uncertain time delay processes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Systematic identification and robust control design for uncertain time delay processes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

An online re-linearization scheme suited for Model Predictive and Linear Quadratic Control
Research output: Research › Report – Annual report year: 2010

ARX-based Model Predictive Control of Systems with Time Delays
Research output: Research - peer-review › Poster – Annual report year: 2010

ARX-Model based Model Predictive Control with Offset-Free Tracking
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

ARX-Model based Model Predictive Control with Offset-Free Tracking
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

ARX MPC for people with type 1 diabetes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

A Trust-region-based Sequential Quadratic Programming Algorithm
Research output: Research › Report – Annual report year: 2010

Control switching in high performance and fault tolerant control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Derivative free filtering using Kalmtool
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010
Derivative free Kalman filtering used for orchard navigation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Implications and Limitations of Ideal Insulin Administration for People with Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Iterative Feedback Tuning of Uncertain State Space Systems
Research output: Research - peer-review › Journal article – Annual report year: 2010

Meal Estimation in Nonlinear Model Predictive Control for Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Nonlinear Model Predictive Control for an Artificial Beta-Cell
Research output: Research - peer-review › Book chapter – Annual report year: 2010

Non-Linear State Estimation Using Pre-Trained Neural Networks
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Optimal Insulin Administration for People with Type 1 Diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Prediction of resonant oscillation
Research output: Research › Patent – Annual report year: 2010

Results from the first full scale wind turbine equipped with trailing edge flaps
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Robust model identification applied to type 1 diabetes
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Robust stability in predictive control with soft constraints
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Stochastic wind turbine control in multiblade coordinates
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Tuning of ARX-based Model Predictive Control for Offset-free Tracking
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

Tuning of ARX-based Model Predictive Control for Offset-free Tracking
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

Tuning of ARX-based Model Predictive Control for Offset-free Tracking
Research output: Research › Article in proceedings – Annual report year: 2010

Tuning of ARX-based Model Predictive Control for Offset-free Tracking
Research output: Research - peer-review › Poster – Annual report year: 2010

Tuning of methods for offset free MPC based on ARX model representations
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010
Tuning of Offset-Free ARX-based SISO Model Predictive Control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

A Concept for fault tolerant controllers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Active Fault Diagnosis - A Stochastic Approach
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Active Fault Diagnosis for Systems with Reduced Model Information
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2009

Active Fault Isolation and Estimation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Active system monitoring applied on wind turbines
Research output: Research › Article in proceedings – Annual report year: 2009

Adaptive Disturbance Estimation for Offset-Free Model Predictive Control
Research output: Research - peer-review › Report – Annual report year: 2009

Attenuating wind turbine loads through model based individual pitch control
Research output: Research › Article in proceedings – Annual report year: 2009

Combination of activity and lying/standing data for detection of oestrus in cows
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Comparing mobile robot localisation algorithms using Kalmtool
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Controller Architectures for Switching
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2009

Data Driven Tuning of State Space Controllers with Observers
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Data Driven Tuning of State Space Controllers with Observers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Data Driven Tuning of State Space Control loops with unknown state information and model uncertainty
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Data Driven Tuning of State Space Control loops with unknown state information and model uncertainty
Research output: Research - peer-review › Poster – Annual report year: 2009

Detection of Parametric Roll Resonance on Ships from Indication of Nonlinear Energy Flow
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

DiaCon: an interdisciplinary approach to diabetes control
Research output: Research - peer-review › Poster – Annual report year: 2009
Energy-based nonlinear control of hydraulically actuated pitch-servo systems
Research output: Research › Article in proceedings – Annual report year: 2009

Fault tolerant control - a residual based set-up
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Glucose modeling and prediction using physical activity variables
Research output: Research › peer-review › Poster – Annual report year: 2009

Improvements to least-squares model identification: an application to diabetes modeling
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Improving Convergence of Iterative Feedback Tuning
Research output: Research › peer-review › Journal article – Annual report year: 2009

Interconnection of subsystems in closed-loop systems
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Iterative Feedback Tuning of State Space Control Loops with Observers Given Model Uncertainty
Research output: Research › peer-review › Poster – Annual report year: 2009

Iterative Feedback Tuning of State Space Control Loops with Observers Given Model Uncertainty
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Kalmtool used for laser scanner aided navigation in orchard
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Mobile Robot Navigation in a Corridor Using Visual Odometry
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Oestrus Detection in Dairy Cows using Automata Modelling and Diagnosis Techniques
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Parametric Roll Resonance Detection using Phase Correlation and Log-likelihood Testing Techniques
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Pertubed Iterative Feedback Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Set point control in the state space setting
Research output: Research › Report – Annual report year: 2009

Stochastic wind turbine modeling for individual pitch control
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Temperature prediction at critical points in district heating systems
Research output: Research › peer-review › Journal article – Annual report year: 2009

Identification for Control: Developments in the Iterative Feedback Tuning Framework
Research output: Research › Ph.D. thesis – Annual report year: 2008
A Design Algorithm using External Perturbation to Improve Iterative Feedback Tuning Convergence
Research output: Research - peer-review › Report – Annual report year: 2008

Active fault diagnosis based on stochastic tests
Research output: Research - peer-review › Journal article – Annual report year: 2008

A Generalized Autocovariance Least-Squares Method for Kalman Filter Tuning
Research output: Research - peer-review › Journal article – Annual report year: 2008

Ecogrid.dk Phase 1 WP4 report: New measures for integration of large scale renewable energy
Research output: Research › Report – Annual report year: 2008

Estimation of Model Uncertainties in Closed-loop Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Improving Convergence of Iterative Feedback Tuning using Optimal External Perturbations
Research output: Research › Sound/Visual production (digital) – Annual report year: 2008

Improving Convergence of Iterative Feedback Tuning using Optimal External Perturbations
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Individual pitch control of wind turbines using local inflow measurements
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Information Based Fault Diagnosis
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Kalmtool Used for Mobile Robot Navigation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Modelling the nonlinear temperature response of district heating systems for model predictive control applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

MPC for uncertain systems using the Youla parameterizations
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Oestrus Detection in Dairy Cows Using Likelihood Ratio Tests
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

On Discrete Time Control of Continuous Time Systems
Research output: Research › Report – Annual report year: 2008

A disturbance decoupling nonlinear control law for variable speed wind turbines
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

Advances in Process Analytics and Process Control Technology (APACT)
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

A fatigue approach to wind turbine control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007
A Generalized Autocovariance Least-Squares Method for Covariance Estimation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

A Multi-Model Approach for System Diagnosis
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

A Novel Algorithm for Enhanced Convergence of the Iterative Feedback Tuning Method
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

A Tool for Kalman Filter Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

A Tool for Kalman Filter Tuning
Research output: Research › Article in proceedings – Annual report year: 2007

Data Driven Controller Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Data Driven Controller Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Data Driven Controller Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Data Driven Tuning of Inventory Controllers
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Data Driven Tuning of Inventory Controllers
Research output: Research › Article in proceedings – Annual report year: 2007

Data Driven Tuning of Lower Level Controllers for Disturbance Rejections
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Estimation of noise covariances and identification of disturbance structure using the autocovariance least-squares method
Research output: Research › Article in proceedings – Annual report year: 2007

Estimation of noise covariances and identification of disturbance structure using the autocovariance least-squares method
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Improving Model Predictive Control Performance Using Disturbance Estimation
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Improving Model Predictive Control Performance using Disturbance Estimation and Systematic Kalman Filter Tuning
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2007

Improving Model Predictive Control Performance Using Systematic Kalman Filter Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Iterative Controller Tuning for Processes with Fold Bifurcations
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007
Iterative Controller Tuning for Process with Fold Bifurcations
Research output: Research › Article in proceedings – Annual report year: 2007

Model Predictive Control with Constraints of a Wind Turbine
Research output: Research › Report – Annual report year: 2007

Stochastic Change Detection based on an Active Fault Diagnosis Approach
Research output: Research › peer-review › Article in proceedings – Annual report year: 2007

Stochastic Change Detection based on an Active Fault Diagnosis Approach
Research output: Research › peer-review › Article in proceedings – Annual report year: 2007

Temperature prediction in district heating systems with cFIR models
Research output: Research › peer-review › Report – Annual report year: 2007

Using Kalmtool in Navigation of Mobile Robots
Research output: Research › Report – Annual report year: 2007

A Generalized Autocovariance Least-Squares Method for Kalman Filter Tuning
Research output: Research › Sound/Visual production (digital) – Annual report year: 2006

Analysis and Design Environment for Flexible Manipulators
Research output: Research › peer-review › Book chapter – Annual report year: 2006

A Simulation Platform for Localization and Mapping
Research output: Research › peer-review › Article in proceedings – Annual report year: 2006

Closed loop identification for Nonlinear process models. Challenges and Methods.
Research output: Research › Article in proceedings – Annual report year: 2006

Fault tolerant control for uncertain systems with parametric faults
Research output: Research › peer-review › Article in proceedings – Annual report year: 2006

Model Identification for Control
Research output: Research › Article in proceedings – Annual report year: 2006

Rapprochement between Active Fault Diagnosis and Change Detection in ARMAX Systems
Research output: Research › peer-review › Article in proceedings – Annual report year: 2006

Active fault diagnosis in closed-loop systems
Research output: Research › peer-review › Article in proceedings – Annual report year: 2005

A new evaluation platform for Navigation systems
Research output: Research › peer-review › Article in proceedings – Annual report year: 2005

Comparison between a PI and LQ-regulation for a 2 MW wind turbine
Research output: Research › peer-review › Report – Annual report year: 2005

Pay-load Estimation of a 2 DOF Flexible Link Robot
Research output: Research › Article in proceedings – Annual report year: 2005
Pay-Load Estimation of a 2DOF Flexible Link Robot
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Process identification Challenges for Nonlinear Model Predictive Control
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Simultanous Location and Mapping - A Simulation Platform
Research output: Research - peer-review › Report – Annual report year: 2005

Stochastic Control - External Models
Research output: Education › Compendium/lecture notes – Annual report year: 2005

Wind farm controllers with grid support
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Dynamic Optimization
Research output: Education › Compendium/lecture notes – Annual report year: 2004

Pressetørring af parketstave. Fysisk model
Research output: Research › Report – Annual report year: 2004

Pressetørring af parketstave - Simulationsmodel
Research output: Research › Report – Annual report year: 2004

Simulation and optimization of wind farm controller
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

The Matrix exponential, Dynamic Systems and Control
Research output: Research › Report – Annual report year: 2004

Adaptation In the fuzzy self-organising controller
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Contribution to a dynamic wind turbine model validation from a wind farm islanding experiment
Research output: Research - peer-review › Journal article – Annual report year: 2003

Iterative Identification for Control and Robust Performance of Bioreactor
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

KALMTOOL for use with MATLAB
Research output: Research - peer-review › Article in proceedings – Annual report year: 2003

Modelling and transient stability of large wind farms
Research output: Research - peer-review › Journal article – Annual report year: 2003

Short-circuit impedance measurement
Research output: Research - peer-review › Journal article – Annual report year: 2003

Delta-operator techniques for pay-load estimation of a 2DOF flexible link robot
Research output: Research - peer-review › Report – Annual report year: 2002
Grey-box Modelling of Pollutant Loads From a Sewer System
Research output: Research · peer-review · Journal article – Annual report year: 1999

Implementation of neural network based non-linear predictive control
Research output: Research · peer-review · Journal article – Annual report year: 1999

Nonlinear Constrained Predictive Control and its application to a Coupled-tanks Apparatus
Research output: Research · peer-review · Report – Annual report year: 1999

Spektralfaktoriserings
Research output: Research · peer-review · Report – Annual report year: 1999

Advances in Derivative-Free State Estimation for Nonlinear Systems
Research output: Research · peer-review · Report – Annual report year: 1998

A Note on the C-implementation of a New Procedure for Guide Mark based Pose Estimation
Research output: Research · peer-review · Report – Annual report year: 1998

Control of Sewer systems and Wastewater treatment plants using pollutant concentration profiles
Research output: Research · peer-review · Journal article – Annual report year: 1998

Grey-Box Modelling of pollutant Loads from the Sewer System for Control of Equalisation Basins
Research output: Research · peer-review · Article in proceedings – Annual report year: 1998

Implementation of neural network based non-linear predictive
Research output: Research · peer-review · Article in proceedings – Annual report year: 1998

Incorporation of Time Delayed Measurements in a Discrete-time Kalman Filter
Research output: Research · peer-review · Article in proceedings – Annual report year: 1998

Location Estimation using Delayed Measurements
Research output: Research · peer-review · Article in proceedings – Annual report year: 1998

Neural Generalized Predictive Control of a non-linear Process
Research output: Research · peer-review · Article in proceedings – Annual report year: 1998

Adaptive Extremum Control and Wind Turbine Control
Research output: Research · Ph.D. thesis – Annual report year: 1997

Autonomous Guided Vehicle - Modelling
Research output: Research · peer-review · Report – Annual report year: 1997

Autonomous Guided Vehicle - Sensor analysis
Research output: Research · peer-review · Report – Annual report year: 1997

Estimating the short-circuit impedance
Research output: Research · peer-review · Article in proceedings – Annual report year: 1997

Estimation of Wind Speed in connection to Wind Turbine
Research output: Research · peer-review · Article in proceedings – Annual report year: 1997
Extremum tracking control of a Wind turbine
Research output: Research - peer-review › Report – Annual report year: 1997

GPC Using a Delta-Domain Emulator-Based Approach
Research output: Research - peer-review › Journal article – Annual report year: 1997

Min-max control of non-linear systems with multi-dissipative opponents
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

Min-max control of non-linear systems with multi-dissipative opponents
Research output: Research - peer-review › Report – Annual report year: 1997

NNSYSID and NNCTRL - Matlab Tools for System Identification and Control with Neural Networks
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

On Multi-dissipative perturbations in linear systems
Research output: Research - peer-review › Report – Annual report year: 1997

Robustness of Linear Systems towards Multi-Dissipative Pertubations
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

Simultaneous H control of a finite number of plants.
Research output: Research - peer-review › Report – Annual report year: 1997

Simultaneous output Feedback H-Control of p Plants using switching
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

Stochastic adaptive control:Appendix Volume 5
Research output: Research - peer-review › Book – Annual report year: 1997

Stochastic adaptive control: Basics Volume 1
Research output: Research - peer-review › Book – Annual report year: 1997

Stochastic adaptive control: Stochastic systems, filtering and control Volume 2
Research output: Research - peer-review › Book – Annual report year: 1997

Stochastic adaptive control: System identification Volume 3
Research output: Research - peer-review › Book – Annual report year: 1997

Stochastic control in the L-structure Genreg.
Research output: Research - peer-review › Report – Annual report year: 1997

Stokastisk adaptiv regulering - Adaptive Systemer
Research output: Education › Compendium/lecture notes – Annual report year: 1997

Stokastisk adaptiv regulering - Appendix
Research output: Education › Compendium/lecture notes – Annual report year: 1997

Stokastisk adaptiv regulering - Basis
Research output: Education › Compendium/lecture notes – Annual report year: 1997
Stokastisk adaptiv regulering - Stokastiske Systemer, filtrering og regulering
Research output: Education › Compendium/lecture notes – Annual report year: 1997

Stokastisk adaptiv regulering - System identifikation
Research output: Education › Compendium/lecture notes – Annual report year: 1997

Stokastisk Regulering i L-strukturen (Genreg)
Research output: Research › peer-review › Report – Annual report year: 1997

Adaptive Extremum control
Research output: Research › peer-review › Report – Annual report year: 1996

A state space approach to the emulator-based GPC design.
Research output: Research › peer-review › Journal article – Annual report year: 1996

Intelligent Predictive Control of Nonlinear Processes Using
Research output: Research › peer-review › Article in proceedings – Annual report year: 1996

NNCTRL - a CANCSD toolkit for MATLAB(R)
Research output: Research › peer-review › Article in proceedings – Annual report year: 1996

Predictive Control Relevant Prefiltering
Research output: Research › peer-review › Report – Annual report year: 1996

Stokastisk Adaptiv Regulering, del 4: Adaptive systemer, volume 4
Research output: Research › peer-review › Book – Annual report year: 1996

The NNSYSID Toolbox - A MATLAB Toolbox for System Identification with Neural Networks
Research output: Research › peer-review › Article in proceedings – Annual report year: 1996

Tracking Keeping Systems with Predictive Control
Research output: Research › peer-review › Report – Annual report year: 1996

A Pitch regulated variable speed wind turbine
Research output: Research › peer-review › Report – Annual report year: 1995

Estimation of Wind Speed in Connection to a Wind Turbine
Research output: Research › peer-review › Report – Annual report year: 1995

Generalized predictive control in the delta-domain
Research output: Research › peer-review › Article in proceedings – Annual report year: 1995

Level and Rate Constraints in Predictive Control
Research output: Research › peer-review › Report – Annual report year: 1995

Methodologies for the Analysis of Data from Sewers and Wastewater Treatment Plants
Research output: Research › peer-review › Article in proceedings – Annual report year: 1995

Methodologies for the Analysis of Data From Sewers and Wastewater Treatment Plants
Research output: Research › Article in proceedings – Annual report year: 1995
Model Reduction and Gain Scheduling Control
Research output: Research - peer-review › Report – Annual report year: 1995

Optimal Prediction in the Delta-Domain
Research output: Research - peer-review › Article in proceedings – Annual report year: 1995

Emulator-Based GPC in the Delta Domain
Research output: Research - peer-review › Report – Annual report year: 1994

Emulator-Based Prediction in the Delta-Domain
Research output: Research - peer-review › Report – Annual report year: 1994

Identification of wastewater treatment processes for nutrient removal on a full-scale WWTP by statistical methods
Research output: Research - peer-review › Journal article – Annual report year: 1994

ML-estimation for Delta Based State Space Models
Research output: Research - peer-review › Article in proceedings – Annual report year: 1994

Modelling and Control of a Wind Turbine
Research output: Research - peer-review › Report – Annual report year: 1994

Pay-Load Estimation of a Flexible Robot
Research output: Research - peer-review › Report – Annual report year: 1994

Prediction using the Delta Operator
Research output: Research - peer-review › Report – Annual report year: 1994

Quadratic Controllers Based on Long Range Prediction
Research output: Research - peer-review › Article in proceedings – Annual report year: 1994

Spectral factorization using the delta operator
Research output: Research - peer-review › Journal article – Annual report year: 1994

Udvikling af on-line gaschromatografisk målesystem til bestemmelse af VFA
Research output: Research - peer-review › Report – Annual report year: 1994

A rapprochement Between Discrete-time operators
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

A short introduction to Matlab
Research output: Education › Compendium/lecture notes – Annual report year: 1993

General predictive control using the delta operator
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

General Predictive Control Using the Delta Operator
Research output: Research - peer-review › Report – Annual report year: 1993

Grey box modelling in two time domains of a wastewater pilot scale plant
Research output: Research - peer-review › Journal article – Annual report year: 1993
Modelling of a One Degree of Freedom Flexible Link
Research output: Research - peer-review › Report – Annual report year: 1993

Stochastic Modelling and adaptive LQG control of a ship
Research output: Research - peer-review › Article in proceedings – Annual report year: 1993

Determination of Flutter Derivatives for the Great Belt Bridge
Research output: Research - peer-review › Conference article – Annual report year: 1992

Adaptive Optimization of the indicated efficiency in spark ignition engines
Research output: Research - peer-review › Report – Annual report year: 1992

A rapprochement Between Discrete-time operators
Research output: Research - peer-review › Report – Annual report year: 1992

Calculas for stochastic systems based on the delta operator.
Research output: Research - peer-review › Report – Annual report year: 1992

Identification of wastewater processes using nonlinear grey box models
Research output: Research - peer-review › Report – Annual report year: 1992

Methods for quantification of the estimator uncertainty in recursive estimation of restricted
Research output: Research - peer-review › Report – Annual report year: 1992

Recursive forgetting algorithms
Research output: Research - peer-review › Journal article – Annual report year: 1992

Sampling of a continuous time linear quadratic criterion
Research output: Research - peer-review › Report – Annual report year: 1992

Spectral factorization using the delta operator
Research output: Research - peer-review › Report – Annual report year: 1992

Analysis of Forgetting Methods
Research output: Research - peer-review › Article in proceedings – Annual report year: 1991

Approximative results for the zero location in sampled dynamical systems
Research output: Research - peer-review › Report – Annual report year: 1991

Introduktion til simulationssystemet {ACSL
Research output: Education › Compendium/lecture notes – Annual report year: 1991

Limit results for sampled transfer functions
Research output: Research - peer-review › Report – Annual report year: 1991

Analysis of On-line Estimation Methods designed for the time-varying case
Research output: Research › Article in proceedings – Annual report year: 1990

A Robust Self-Tuning Controller for Time Varying Systems
Research output: Research - peer-review › Report – Annual report year: 1990
Deterministic Convergence of Recursive Forgetting Algorithms
Research output: Research - peer-review › Report – Annual report year: 1990

Identifiability Analysis and Calibration of Models for Waste Water Treatment Processes
Research output: Research - peer-review › Report – Annual report year: 1990

Selective Forgetting in Adaptive procedures
Research output: Research - peer-review › Article in proceedings – Annual report year: 1990

System Identification - a Sensitivity Approach
Research output: Research › Article in proceedings – Annual report year: 1990

Simultaneous Estimation of Innovations variance and States in a Dynamic System
Research output: Research - peer-review › Article in proceedings – Annual report year: 1988

Adaptive Minimum Energy Control of Large Diesel Engines
Research output: Research - peer-review › Article in proceedings – Annual report year: 1986

Minimum Energy Control of Large Diesel Engines
Research output: Research - peer-review › Journal article – Annual report year: 1986

A Robust Self Tuning Controller for Timevarying Dynamic Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 1985

Robust Self Tuning Controllers
Research output: Research › Ph.D. thesis – Annual report year: 1985

Self Tuning Control of Abruptly Changing Dynamic Systems
Research output: Research › Article in proceedings – Annual report year: 1984

Self Tuning Control of Plants with abrupt changes
Research output: Research - peer-review › Article in proceedings – Annual report year: 1984

Robust Self Tuning Controllers in Non Stationary Situations
Research output: Research - peer-review › Journal article – Annual report year: 1982

Robust Self Tuning Controllers in Non Stationary Situations
Research output: Research - peer-review › Article in proceedings – Annual report year: 1982

Projects:

Model Predictive Control in Urban Systems
Project: PhD

Stochastic Dynamic Optimization and Control Theory
Project: PhD

Human Behavior of Track Pilot
Project: Research
Learning-based Model Predictive Control of Spray Dryers
Project: PhD

Efficient Operation of Energy Grids
Project: PhD

Ulineær optimal robust styring og vindmølle regulering
Project: PhD

Integretert Aeroservoelastisk Analyse og Design af Vindmøller
Project: PhD

Data assimilering og autokalibrering i 2D/3D hydrodynamisk numerisk modellering af det marine miljø
Project: PhD

Regulering af systemer med begrænsninger
Project: PhD

Modellering og Prædiktiv Styring af Spildevandssystemer
Project: PhD

Stokastisk Prædiktiv Kontrol i Komplekse Systemer
Project: PhD

Aktiv kontrol af udstødnings lyd fra vibrerende strukturer
Project: PhD

Identifikation af modeller for kedel- og varmeanlæg
Project: PhD

Identifikation/adaptiv regulering af systemer med ukendt modelstruktur og væsentlige ulineariteter
Project: PhD

Market Mechanisms for the integration of Distributed Energy Resources
Project: PhD

Nonlinear Model Predictive Control for Oil Reservoirs
Project: PhD

Fault Diagnosis and Optimal Control of Electro - Mechanical systems
Project: PhD

Economic Model Predictive Control for Spray Drying Plants
Project: PhD

Self-Organising Distributed Control of a Distributed Energy System with a High Penetration of Renewable Energy
Project: PhD

Data assimilation in atmospherie dispersion of radioactive material
Project: PhD
Analysis of dynamic behaviour of electric power systems with large amount of wind power  
Project: PhD

Possible Power of Downregulated Offshore Wind power plants  
Project: PhD

Optimal and Reproducible Operation of Batch Processes  
Project: PhD

Sensor Design and Control Algorithm for Flaps on Wind Turbine Blades  
Project: PhD

Grey box Modelling of Hydraulic Systems  
Project: PhD

Digital steering og modellering af dynamiske systemer ved hurtig sampling.  
Project: PhD

Robust control system design for a wind energy commerson system  
Project: PhD

Deltamodelling  
Project: PhD

Robotteknik  
Project: PhD

Design and Control of Time-Varying Chmical Processes  
Project: PhD

Connection between control design and system identification  
Project: PhD

Performance enhancement and load reduction on wind turbines using inflow measurements  
Project: PhD

Optimizing control of integrated processes  
Project: PhD

Stochastic Dynamic modelling of Oxgen  
Project: PhD

Stochastic modelling of nonlinear systems  
Project: PhD

Optimality and Robustness of Stochastic Adaptive Controllers  
Project: PhD

Mechatronic approach in design and modelling of robotic manipulators  
Project: PhD
Avancerede metoder i adaptiv regulering
Project: PhD

Intelligent Actuators and motion control of multivariable hydraulic systems
Project: PhD

Model Identification for Predictive Control and Optimization
Project: PhD

Model Predictive Control based on Stochastic Differential Equations - An Artificial Pancreas with Fast Insulin, Glucagon and Multiple Sensors
Project: PhD

Robotic Manipulation of Offshore Drilling Equipment
Project: PhD

Fault Diagnosis for Identification of Deviant Behavior
Project: PhD

Statistical modelling of tagging data from marine animals
Project: PhD

Estimation of Conditional densities for predictions in nonlinear stochastic processes - with applications to wind power systems
Project: PhD

Navigationssystemer til mobile robotter
Project: PhD

Nonlinear identification and optimal control of fed-batch processes
Project: PhD

Modeling and Forecasting for Optimal Participation of Renewable Energy in Deregulated Energy Markets
Project: PhD

Wind Turbine with Trailing Edge Flaps for Load Alleviation
Project: PhD

Power Management for Refrigeration Systems
Project: PhD

Economic MPC for Large and Distributed Energy Systems
Project: PhD

Stochastic Model Predictive Control with Applications in Smart Energy Systems
Project: PhD

Model Predictive Control algorithms for pen and pump insulin administration
Project: PhD
Concurrent Aero-Servo-Elastic analysis and Design of wind turbines  
Project: PhD

Numerical Methods for Reservoir Simulation and Optimization  
Project: PhD

Demand Side Optimization via Direct Load Control in Smart Grids  
Project: PhD

Model Predictive Control for Smart Energy Systems  
Project: PhD

Enhanced Subsea Acoustically Aided Inertial Navigation  
Project: PhD

Optimization Algorithms for Experimental Design, Parameter Estimation, and Control of Dynamic Systems  
Project: PhD

Data Assimilation in Marine Modelling  
Project: PhD

Model-based predictive control of wind turbines  
Project: PhD

Adaptive Trailing Edge Flap, control for enhanced load alleviation  
Project: PhD

Robust adaptive control system design for aerospace applications.  
Project: PhD

BiPS - None Touchable Inspections of industrial Processes and Systems  
Project: Research

Identification og regulering af rensningsanlæg  
Project: Research

Measurement of short-circuit capacity  
Project: Research

Adaptive control of a cutting process.  
Project: Research

Adaptive Extremum control.  
Project: Research

Delta-domain predictive control and identification for control.  
Project: Research

Robust adaptive control  
Project: Research
**Dissipative methods**
Project: Research

**European Consortium for Mathematics in Industry (ECMI)**
Project: Research

**Modelling and control of flexible robot**
Project: Research