Ole Ravn - DTU Orbit (26/01/2019)

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Research outputs:

On-line Fault Diagnosis of Produced Water Treatment with Multilevel Flow Modeling
Research output: Research - peer-review › Journal article – Annual report year: 2018

Autonomous 3d model generation of unknown objects for dual-manipulator humanoid robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Force-based perception and manipulation, the DTU team competing in MBZIRC 2017
Research output: Research - peer-review › Journal article – Annual report year: 2018

Online Semantic Segmentation and Manipulation of Objects in Task Intelligence for Service Robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Application of visual servoing for grasping and placing operation in slaughterhouse
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Computer based Control of the Separation Process in a Combine Harvester
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Design of Laboratory Environment for Development of Cleaning System Automation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Door and cabinet recognition using convolutional neural nets and real-time method fusion for handle detection and grasping
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Generalized framework for the parallel semantic segmentation of multiple objects and posterior manipulation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Identifying Causality from Alarm Observations
Research output: Research - peer-review › Paper – Annual report year: 2017

On-the-go throughput prediction in a combine harvester using sensor fusion
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Positioning the laparoscopic camera with industrial robot arm
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Representing Operational Modes for Situation Awareness
Research output: Research - peer-review › Conference article – Annual report year: 2017

A Framework for Semi-Automated Generation of a Virtual Combine Harvester
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

Visual Servoing for Object Manipulation: A Case Study in Slaughterhouse
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Assessing Operational Situations.
Research output: Research › Ph.D. thesis – Annual report year: 2015

Design of multilevel flow modelling-based decision support system by using multiagent platform
Research output: Research - peer-review › Journal article – Annual report year: 2015

Experiences from developing a new course in mechatronics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

General model and control of an n rotor helicopter
Research output: Research - peer-review › Conference article – Annual report year: 2015

Measuring and Modelling Delays in Robot Manipulators for Temporally Precise Control using Machine Learning.
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Sensor based real-time control of robots

Calibration between a Laser Range Scanner and an Industrial Robot Manipulator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Generic trajectory representation and trajectory following for wheeled robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Representing Operational Knowledge of PWR Plant by Using Multilevel Flow Modelling
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

UR10 Performance Analysis
Research output: Research - peer-review › Report – Annual report year: 2015

A novel hypothesis splitting method implementation for multi-hypothesis filters
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Apply Functional Modelling to Consequence Analysis in Supervision Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013
Consequence Reasoning in Multilevel Flow Modelling
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

DARC: Next generation decentralized control framework for robot applications
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Exception detection and handling in mission control for mobile robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Hand-Eye Calibration and Inverse Kinematics of Robot Arm using Neural Network
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Multilevel Flow Modeling Based Decision Support System and Its Task Organization
Research output: Research - peer-review › Book chapter – Annual report year: 2013

Artificial Neural Network Based State Estimators Integrated into Kalmtool
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Designing competitions for education in robotics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Multilayer controller for field robots - High portability and modularity to ease implementation
Research output: Research - peer-review › Paper – Annual report year: 2012

Ping-Pong Robotics with High-Speed Vision System
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Differential evolution to enhance localization of mobile robots
Research output: Research - peer-review › Article in proceedings – 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

Spacio-temporal situation assessment for mobile robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Towards Competitive Commercial Autonomous Robots: The Configuration Problem
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

A Course Programme In Mobile Robotics with Integrated Hands-on Exercises and Competitions
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Autonomous Rule Based Robot Navigation In Orchards
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 › Article in proceedings – Annual report year: 2010

Maintenance of Process Control Algorithms based on Dynamic Program Slicing  
Research output: Research › Article in proceedings – Annual report year: 2010

Mobotware – A Plug-in Based Framework For Mobile Robots  
Research output: Research › Article in proceedings – Annual report year: 2010

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

Visual Navigation for Mobile Robots  
Research output: Research › Book chapter – Annual report year: 2010

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

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

Landbrugsrobotter på vej  
Research output: Communication › Journal article – Annual report year: 2009

Mission Management for Mobile Robots  
Research output: Research › Conference abstract for conference – Annual report year: 2009

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

Safe and Reliable - Further Development of a Field Robot  
Research output: Research › Article in proceedings – Annual report year: 2009

Towards a modern concept for teaching control engineering  
Research output: Research › Article in proceedings – Annual report year: 2009

Assisted Monitoring and Maintenance of Control Systems  
Research output: Research › Article in proceedings – Annual report year: 2008

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

Vision Assisted Laser Scanner Navigation for Autonomous Robots  
Research output: Research › Article in proceedings – Annual report year: 2008

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

Analysis and Design Environment for Flexible Manipulators  
Research output: Research › 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

Multilayer Controller for Outdoor Vehicle
Research output: Research - peer-review › Article in proceedings – Annual report year: 2006

Traversable terrain classification for outdoor autonomous robots using single 2D laser scans
Research output: Research - peer-review › Journal article – Annual report year: 2006

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

Autonomous Robot Navigation In Public Nature Park
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Exploration and Search with Cooperative Mobile Robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Pay-load Estimation of a 2 DOF Flexible Link Robot
Research output: Research - peer-review › 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

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

Terrain Classification for Outdoor Autonomous Robots using 2D Laser Scans.: Robot perception for dirt road navigation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

SMR-CL, A Real-time Control Language for Mobile Robots
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

Trinocular Stereo Vision for Intelligent Robot Navigation
Research output: Research - peer-review › Article in proceedings – Annual report year: 2004

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

NNSYSID - toolbox for system identification with neural networks
Research output: Research - peer-review › Journal article – Annual report year: 2002

Control of an under activated unstable nonlinear object
Research output: Research - peer-review › Journal article – Annual report year: 2001

NNSYSID and NNCTRL Tools for system identification and control with neural networks
Research output: Research - peer-review › Journal article – Annual report year: 2001
Path following mobile robot in the presence of velocity constraints
Research output: Research › Report – Annual report year: 2001

Pay-load estimation of a 2DOF flexible link robot using a delta-operator technique
Research output: Research › peer-review › Article in proceedings – Annual report year: 2001

Receding Horizon Approach to Path Following Mobile Robot in Presence of Velocity Constraints
Research output: Research › peer-review › Article in proceedings – Annual report year: 2001

Receding Horizon Approach to Path Following Mobile Robot in Presence of Constraints.
Research output: Research › peer-review › Article in proceedings – Annual report year: 2001

A Framework for Real-Time Embedded PC Programming
Research output: Research › peer-review › Article in proceedings – Annual report year: 2000

Control of an under actuated unstable nonlinear object
Research output: Research › peer-review › Article in proceedings – Annual report year: 2000

Neural Networks for Modelling and Control of Dynamic Systems - A Practitioner's Handbook
Research output: Research › peer-review › Book – Annual report year: 2000

New developments in state estimation for Nonlinear Systems
Research output: Research › peer-review › Journal article – Annual report year: 2000

On-line System Identification and Adaptive Control using the Adaptive Blockset
Research output: Research › peer-review › Article in proceedings – Annual report year: 2000

Using DIS for linking simulation and animation in Simulink and VRML
Research output: Research › peer-review › Article in proceedings – Annual report year: 2000

A new Approach for Kalman filtering on Mobile Robots in the presence of uncertainties
Research output: Research › peer-review › Article in proceedings – Annual report year: 1999

Auto-calibration of Systematic Odometry Errors in Mobile Robots
Research output: Research › peer-review › Book chapter – Annual report year: 1999

Design of Kalman filters for mobile robots: Evaluation of the kinematic and odometric approach
Research output: Research › peer-review › Article in proceedings – Annual report year: 1999

Easy and Accurate State Estimation for Nonlinear Systems
Research output: Research › peer-review › Article in proceedings – Annual report year: 1999

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

Simulation and Animation in Simulink and VRML
Research output: Research › peer-review › Article in proceedings – Annual report year: 1999

Using the adaptive blockset for simulation and rapid prototyping
Research output: Research › peer-review › Article in proceedings – 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

Experimental Autonomous Vehicle Systems: Requirements and a prototype architecture
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 for an Autonomously Guided Vehicle using an Augmented Kalman Filter to Autocalibrate the Odometry
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

Sensor management for identity fusion on a mobile robot
Research output: Research - peer-review › Article in proceedings – Annual report year: 1998

Simulation and Rapid Prototyping of Adaptive Control Systems using the Adaptive Blockset for Simulink
Research output: Research - peer-review › Article in proceedings – Annual report year: 1998

A Client/Server Based Approach for Development of Control Systems
Research output: Research - peer-review › Report – Annual report year: 1997

Adaptive Systeemer: en kort introduktion
Research output: Research - peer-review › Report – 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

Autonomous Vehicle Interaction with In-door Environments
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

Computer aided control engineering: current approaches to design methodologies
Research output: Research - peer-review › Article in proceedings – Annual report year: 1997

Modelling and calibration with mechatronic blockset for Simulink
Research output: Research - peer-review › Article in proceedings – 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

Robot Control for Dynamic Environment Using Vision and Autocalibration
Research output: Research - peer-review › Report – Annual report year: 1997

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

Mechatronic blockset for Simulink-concept and implementation
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

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

Augmented models for improving vision control of a mobile robot
Research output: Research - peer-review › Article in proceedings – Annual report year: 1994

Implementational issues in CACSD
Research output: Research - peer-review › Article in proceedings – Annual report year: 1994

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

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

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

Requirements for user interaction support in future CACE environments
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

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
Modelling of a One Degree of Freedom Flexible Link
Research output: Research - peer-review › Report – Annual report year: 1993

Model reference adaptive control and adaptive stability augmentation
Research output: Research - peer-review › Article in proceedings – Annual report year: 1992

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

A rapprochement Between Discrete-time operators
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

The evolution of CACSD tools—a software engineering perspective
Research output: Research - peer-review › Article in proceedings – Annual report year: 1992

Real-time adaptive control using CPAS on a MC68010-based process computer
Research output: Research - peer-review › Article in proceedings – Annual report year: 1991

A PID autotuner utilizing GPC and constraint optimization
Research output: Research - peer-review › Article in proceedings – Annual report year: 1990

On user-friendly interface construction for CACSD packages
Research output: Research - peer-review › Article in proceedings – Annual report year: 1989

On flexible CAD of adaptive control and identification algorithms
Research output: Research - peer-review › Article in proceedings – Annual report year: 1988

Projects:

Optimisation and automation of underwater payload data processing using AI-based technologies
Project: PhD

Counteraction planning based on Multilevel Flow Modelling
Project: PhD

Realtidskontrol af ikke-lineære systemer
Project: PhD

Functional Modeling of water treatment system
Project: PhD

Modulær Platform til Kommercielle Mobile Robotter
Project: PhD

Regulering af systemer med begrænsninger
Project: PhD
Combining functional modeling and reasoning with on-line event analytics  
Project: PhD

Managing Complex Systems and Applications fusing methods from AI and Control and Signal Processing  
Project: PhD

Optimisation of Combine Harvesters Yield Using Model-Based Control  
Project: PhD

Situation Assessment for Mobile Robots  
Project: PhD

Active performance assessment and system monitoring for refrigeration systems  
Project: PhD

Maintenance Free and Sustainable High-Level Control in Cement and Mining Industry  
Project: PhD

Design of Adaptive Systems  
Project: PhD

Menneske-maskine samarbejde i distribuerede automatiseringssystemer  
Project: PhD

Distribueret styring af autonome systemer  
Project: PhD

Mechatronic approach in design and modelling of robotic manipulators  
Project: PhD

Avancerede metoder i adaptiv regulering  
Project: PhD

Styring af hurtige flexible robotter  
Project: PhD

Simulering og kontrol af ikke-holonome mekaniske systemer  
Project: PhD

Navigationssystemer til mobile robotter  
Project: PhD

New AI and its Application in Hospital Service Robotics  
Project: PhD

Consequence Reasoning in Multilevel Flow Modeling and its Application  
Project: PhD

Sensorbaseret realtidsstyring af robotter  
Project: PhD
Use of Multilevel Flow Modelling for on-line supervision in the oil and gas industry
Project: Research

Innovation consortium Real time Controlled Robots for the Meat Industry
Project: Research

Dynamic control of robotic manipulators - mechatronics approach
Project: Research

IMCIA Intelligent Motion Control & Intelligent Actuators.
Project: Research

Computer Aided Control System Design (CACSD)
Project: Research

Adaptive control of a cutting process.
Project: Research

Adaptive Control
Project: Research

Decoupled visual control for robots based on structured light and weld seam tracking
Project: Research

Design Guidelines for Mobile Autonomous Vehicle
Project: Research

Real-Time Programming for Automatic Control and Autonomous Systems
Project: Research

Stability and Performance of Neural Regulators
Project: Research

Experimental systems and test-bed development
Project: Research

Use of Vision in automation system
Project: Research

Activities:

Field Robot Event 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

DAu Konference: Den 4. Industrielle Revolution
Activity: Attending an event › Participating in or organising a conference

Kompetenceudviklingsdage
Activity: Other
Member of DTU Academic Council (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

10th IEEE International Conference on Control & Automation
Activity: Talks and presentations › Conference presentations

DTU RoboCup 2013
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

European Robotic Forum 2013
Activity: Talks and presentations › Conference presentations

10th European Workshop on Advanced Control and Diagnosis
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

International Workshop on Functional Modelling
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

8th HOLMUG meeting
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Lund Institute of Technology (External organisation)
Activity: Membership › Membership in review committee

16th IFAC Symposium on System Identification
Activity: Talks and presentations › Conference presentations

DTU RoboCup 2012
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

European Robotic Forum 2012
Activity: Talks and presentations › Conference presentations

5th International Conference on Cognitive Systems
Activity: Attending an event › Participating in or organising a conference

Innovation Network RoboCluster (External organisation)
Activity: Membership › Membership of research networks or expert groups

2011 American Control Conference
Activity: Talks and presentations › Conference presentations

DTU RoboCup 2011
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Teaching Evaluation Exercise at Aalto University (External organisation)
Activity: Membership › Membership in review committee

The Industrial PhD Programme Committee (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar
Member of the board of DIKA, Danish Industrial Robot Association (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Member of DTU Academic Council (External organisation)
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Press clippings:

Go’ Morgen P3
Press/Media: Press / Media

Go’ morgen P3
Press/Media: Press / Media

Go’ Morgen P3
Press/Media: Press / Media

DR2 Morgen
Press/Media: Press / Media

P1 Morgen
Press/Media: Press / Media

Derfor er det smart at dreje batterierne i fjernbetjeningen
Press/Media: Press / Media

DR2 Dagen
Press/Media: Press / Media

Automatiske dræber-robotter møder kritik
Press/Media: Press / Media

Aftenshowet
Press/Media: Press / Media