Utilization of Models for Online Estimation in Combustion Applications
Korpela, T. 13 Oct 2017 Tampere University of Technology. 84 p. (Tampere University of Technology. Publication; vol. 1496)
Research output: Collection of articles › Doctoral Thesis

Capacitive Facial Activity Measurement: Online Detection of Facial Expressions
Rantanen, V. 17 Aug 2017
Research output: Scientific › Digital or Visual Products

Indirect NOx emission monitoring in natural gas fired boilers
Research output: Scientific - peer-review › Article

Monocular vision-based range estimation supported by proprioceptive motion
Davidson, P., Raunio, J-P. & Piche, R. 2017 In : Gyroscopy and Navigation. 8, 2, p. 150-158
Research output: Scientific - peer-review › Article

Stability-Guaranteed Nonlinear Model-Based Control of Hydraulic Robotic Manipulators
Koivumäki, J. 2 Dec 2016 Tampere University of Technology. 71 p. (Tampere University of Technology. Publication; vol. 1446)
Research output: Collection of articles › Doctoral Thesis

State Estimation for a Class of Piecewise Affine State-Space Models
Research output: Scientific - peer-review › Article

Model-based force and position tracking control of an asymmetric cylinder with a digital hydraulic valve
Research output: Scientific - peer-review › Article

Planning for robotic exploration based on forward simulation
Research output: Scientific - peer-review › Article

Combating Unilateral Facial Paralysis With Low-Latency Muscle Reanimation
Research output: Scientific › Digital or Visual Products

Fuel optimal controller for hydrostatic drives and real-world experiments on a wheel loader
Research output: Scientific - peer-review › Article

Mimetic Interfaces Project: Eye Blink Pacing
Research output: Scientific › Digital or Visual Products

Constrained Global Path Optimization for Articulated Steering Vehicles
Choi, J-W. & Huhtala, K. 1 Apr 2016 In : IEEE Transactions on Vehicular Technology. 65, 4, p. 1868-1879
Research output: Scientific - peer-review › Article
An ICT-driven Hybrid Automation System for Elderly Care Support: A Rehabilitation Facility Study Case
Evchina, Y. & Martinez Lastra, J. L. 15 Mar 2016 In : Journal of Housing for the Elderly. 30, 1, p. 52-74
Research output: Scientific - peer-review › Article

Product, process and resource model coupling for knowledge-driven assembly automation
Research output: Scientific - peer-review › Article

Longitudinal study on text entry by gazing and smiling
Research output: Scientific - peer-review › Conference contribution

Mimetic Interfaces Project: Functional Electrical Stimulation of Facial Muscles
Research output: Scientific › Digital or Visual Products

High strain rate radial compression of Norway spruce earlywood and latewood
Research output: Scientific - peer-review › Article

A novel micro-robotic approach to study the environmental degradation of matrix and fibre materials
Research output: Scientific › Conference contribution

Cyber-Physical Systems for Open-Knowledge-Driven Manufacturing Execution Systems
Research output: Scientific - peer-review › Article

Design and simulation of a thermal flow sensor for gravity-driven microfluidic applications
Research output: Scientific - peer-review › Conference contribution

Determination of environmental degradation of matrix and fibre materials with a novel, statistically reliable micro-robotic approach
Research output: Scientific › Conference contribution

Functionality Testing of Water Pressure and Flow Calculation for Dynamic Power Plant Modelling
Research output: Scientific - peer-review › Conference contribution

Gain-Scheduled Composite Nonlinear Feedback Control of an Exothermic Chemical Reactor
Research output: Scientific - peer-review › Conference contribution

Оценка дальности на основе монокулярного зрения и проприоцептивного движения
Davidson, P., Raunio, J-P. & Piche, R. 2016 In : Giroskopiya I Navigatsiya. 24, 4, p. 98-111
Research output: Scientific - peer-review › Article
NOx-päästöjen epäsuora monitorointi maakaasu- ja öljykäyttöisissä lämpövoimalaitoksissa
Research output: Professional › Commissioned report

Real Time Monitoring of Environmental Efficiency of Power Plants
Majanne, Y., Korpela, T., Judd, J., Koskela, S., Laukkanen, V. & Häyrinen, A. 11 Dec 2015 9th IFAC Symposium on
Control of Power and Energy Systems CPES 2015 — New Delhi, India, 9—11 December 2015. p. 495–500 (IFAC-
PapersOnLine; vol. 48, no. 30)
Research output: Scientific - peer-review › Conference contribution

On-Board Electronic Control Systems of Future Automated Heavy Machinery
Karhu, O. 4 Dec 2015 Tampere University of Technology. 148 p. (Tampere University of Technology. Publication; vol.
1352)
Research output: Monograph › Doctoral Thesis

Kalman filter with a linear state model for PDR+WLAN positioning and its application to assisting a particle filter
Raitoharju, M., Nurminen, H. & Piché, R. 1 Dec 2015 In : Eurasip Journal on Advances in Signal Processing. 2015, 1, 33
Research output: Scientific - peer-review › Article

Towards a simulation-based product process: SIMPRO research project final report
Alanen, J., Keränen, J., Kortelainen, J., Muhammad, A., Virtanen, J., Multanen, P., Hietala, J-P., Krogerus, T., Hyvönen,
M., Huhtala, K., Pajunen, S., Coatanea, E., Baharudin, E., Matkainen, M., Mikkola, A., Gao, X-Z., Järvenpää, S.,
TUTKIMUSKESKUS. 112 p. (VTT Technology; vol. 240)
Research output: Professional › Commissioned report

Robust Inference for State-Space Models with Skewed Measurement Noise
1902 5 p.
Research output: Scientific - peer-review › Article

Clean Components of Fluid Power System Reduce Maintenance Costs
Rinkinen, J. & Elo, L. 1 Oct 2015 Maintenance, Condition Monitoring and Diagnostics; Maintenance Performance
Measurement and Management: MCMD 2015 and MPMM 2015. 8 p. 2 (2015-10-01)
Research output: Scientific › Conference contribution

Influence of application method and sintering temperature on porosity and thermal conductivity of two commercial silicon
carbide based castables
Proceeding 224
Research output: Scientific › Conference contribution

Automated Microrobotic Manipulation of Paper Fiber Bonds
Research output: Scientific - peer-review › Conference contribution

Decomposition analysis of Cuban energy production and use: Analysis of energy transformation for sustainability
Research output: Scientific - peer-review › Article

Energy Efficiency Considerations for LED-Based Lighting of Multipurpose Outdoor Environments
An approach for knowledge-driven product, process and resource mappings for assembly automation
Research output: Scientific - peer-review › Article

Automatic image-based detection and inspection of paper fibres for grasping
Research output: Scientific - peer-review › Article

Stability-Guaranteed Force-Sensorless Contact Force/Motion Control of Heavy-Duty Hydraulic Manipulators
Research output: Scientific - peer-review › Article

Context-aware knowledge-based middleware for selective information delivery in data-intensive monitoring systems
Research output: Scientific - peer-review › Article

Microrobotic platform with integrated force sensing microgrippers for characterization of fibrous materials: Case study on individual paper fibers
Saketi, P. 21 Jul 2015 Tampere: Tampere University of Technology. 116 p. (Tampere University of Technology. Publication; vol. 1309)
Research output: Monograph › Doctoral Thesis

Divertor remote handling for DEMO: Concept design and preliminary FMECA studies
Research output: Scientific - peer-review › Article

A knowledge-based solution for automatic mapping in component based automation systems
Research output: Scientific - peer-review › Conference contribution

From artificial cognitive systems and open architectures to cognitive manufacturing systems
Research output: Scientific - peer-review › Conference contribution

Knowledge-driven finite-state machines. Study case in monitoring industrial equipment
Research output: Scientific - peer-review › Conference contribution

Multiple ontology workspace management and performance assessment
Research output: Scientific - peer-review › Conference contribution

Representation of manufacturing equipment and services for OKD-MES: From service descriptions to ontology
Research output: Scientific - peer-review › Conference contribution
Towards processing and reasoning streams of events in knowledge-driven manufacturing execution systems
Research output: Scientific - peer-review › Conference contribution

Vision-based path coordination for multiple mobile robots with four steering wheels using an overhead camera
Research output: Scientific - peer-review › Conference contribution

Service-oriented approach to fault tolerance in CPSs
Research output: Scientific - peer-review › Article

A time-optimal bounded velocity path-following controller for generic Wheeled Mobile Robots
Research output: Scientific - peer-review › Conference contribution

Electroplated nickel microspring and low-friction precision linear slider: A novel micro-force sensing tool
Research output: Scientific - peer-review › Conference contribution

Novel pairwise coupled kinematic solution for algebraic angular acceleration estimation of serial link manipulators
Research output: Scientific - peer-review › Conference contribution

Optimal sensing via multi-armed bandit relaxations in mixed observability domains
Research output: Scientific - peer-review › Conference contribution

Passive resonance sensor based method for monitoring particle suspensions
Research output: Scientific - peer-review › Article

Model-Driven Development of Control Applications: On Modeling Tools, Simulations and Safety
Vepsäläinen, T. 5 Jun 2015 Tampere University of Technology. 115 p. (Tampere University of Technology. Publication; vol. 1303)
Research output: Collection of articles › Doctoral Thesis

Active Object Recognition via Monte Carlo Tree Search
Research output: Professional › Conference contribution

Energy Efficient Digital Hydraulic Valve Control
Huova, M. 27 May 2015 Tampere: Tampere University of Technology. 158 p. (Tampere University of Technology. Publication; vol. 1298)
Research output: Monograph › Doctoral Thesis
Microrobotic system for multi-rate measurement of bio-based fibres Z-directional bond strength
Research output: Scientific - peer-review › Article

Digital Hydraulics on Rails – Pilot Project of Improving Reliability on Railway Rolling Stock by Utilizing Digital Valve System
Research output: Scientific › Conference contribution

Fault Tolerance of Digital Hydraulics in High Dynamic Hydraulic System
Research output: Scientific › Conference contribution

Hydraulic Hybrid Actuator: Theoretical Aspects and Solution Alternatives
Research output: Scientific › Conference contribution

Vehicle Mass Estimation for Hydraulic Drive System using Longitudinal Motion Model
Research output: Scientific › Conference contribution

On improvement of transient stage of composite nonlinear feedback control using arbitrary order set point filters
Research output: Scientific - peer-review › Conference contribution

Iterative and Participative Axiomatic Design Process in complex mechanical assemblies: case study on fusion engineering
Research output: Scientific - peer-review › Article

Composite Nonlinear Feedback Control of a Chemical Reactor
Research output: Scientific - peer-review › Conference contribution

Systematic approach to secure automation – coordinated voltage control use-case
Research output: Scientific - peer-review › Conference contribution

High performance nonlinear motion/force controller design for redundant hydraulic construction crane automation
Research output: Scientific - peer-review › Article

Modeling and Experimental Characterization of Pressure Drop in Gravity-Driven Microfluidic Systems
Research output: Scientific - peer-review › Article
PVDF Microforce Sensor for the Measurement of Z-directional Strength in Paper Fiber Bonds
Research output: Scientific - peer-review › Article

Characteristics of Digital Hydraulics with Commercial Controllers
Research output: Scientific › Conference contribution

Numerically Efficient Flow Model for On/Off Valves
Research output: Scientific › Conference contribution

Problems Analysis and Solutions for the Establishment of Augmented Reality Technology in Maintenance and Education
Martínez Landa, H. 30 Jan 2015 Tampere University of Technology. 67 p. (Tampere University of Technology. Publication; vol. 1275)
Research output: Collection of articles › Doctoral Thesis

Fault tolerant control architecture design for mobile manipulation in scientific facilities
Research output: Scientific - peer-review › Article

A comparison of five optical surface topography measurement methods
Research output: Scientific - peer-review › Article

Adaptive autoregressive model for reduction of noise in SPECT
Research output: Scientific - peer-review › Article

A dynamic paper machine simulator for testing of model predictive control applications
Research output: Scientific - peer-review › Conference contribution

A Mapping Method Tolerant to Calibration and Localization Errors Based on Tilting 2D Laser Scanner
Research output: Scientific - peer-review › Conference contribution

A model based analysis of the measurement errors in inductively coupled passive resonance sensors
Research output: Scientific - peer-review › Conference contribution

Anomaly Detection and Diagnostics of a Wheel Loader Using Dynamic Mathematical Model and Joint Probability Distributions
Research output: Scientific - peer-review › Conference contribution
Architecture for Open, Knowledge-Driven Manufacturing Execution System
Research output: Scientific - peer-review › Conference contribution

Assistive Situation Awareness System for Mobile Multimachine Work Environments
Research output: Scientific - peer-review › Article

Bayesian statistical analysis for performance evaluation in real-time control systems
Research output: Scientific - peer-review › Conference contribution

Cooperative Sensing and Path Planning In a Multi-Vehicle Environment
Research output: Scientific - peer-review › Conference contribution

Definition of key performance indicators for energy efficient assessment in the transport sector
Research output: Scientific - peer-review › Conference contribution

Design Patterns for Model-Driven Development
Research output: Scientific - peer-review › Article

Developing Open Knowledge-Driven Manufacturing Execution System
Research output: Scientific - peer-review › Chapter

Empowering Industrial Maintenance Personnel with Situationally Relevant Information using Semantics and Context Reasoning
Research output: Scientific - peer-review › Conference contribution

Gain Scheduling Full State Feedback with D-Implementation for Velocity Tracking of Hydrostatic Drive Transmission
Research output: Scientific - peer-review › Conference contribution

Industrial Tools for micromanipulation
Research output: Scientific › Chapter

In situ hybridization of pulp fibres using Mg-Al layered double hydroxides
Keskipakopumppujen mitoituksen ja käytön haasteet
Research output: Professional › Article

Low-cost 3D lidar for the mapping of autonomous mobile work machine
Research output: Scientific › Conference contribution

Methodology for energy efficiency assessment in the transport sector for smart cities
Research output: Scientific › Conference contribution

Motion Model for Positioning with Graph-Based Indoor Map
Research output: Scientific › Conference contribution

Optimal operation of a three camera system on a four-wheel robot
Raunio, J-P., Ritala, R. & Välimäki, T. 2015 IMEKO XXI World Congress, Fundamental and Applied Metrology, Proceedings, August 31-September 4, 2015, Prague, Czech Republic. p. 968-973
Research output: Scientific › Conference contribution

Parameters affecting the energy performance of the transport sector in smart cities
Research output: Scientific › Conference contribution

Photometric stereo system for detailed analysis of material surfaces
Research output: Scientific › Conference contribution

Piezoelectric sensitivity measurements of cellulose nanofibril sensors
Research output: Scientific › Conference contribution

Risk-aversive optimal planning of sensing
Lauri, M., Ropponen, A. & Ritala, R. 2015 In : Journal of Physics: Conference Series. 588, 1, 012023
Research output: Scientific › peer-review › Article

Security Analysis of Various Industrial Devices
Research output: Professional › Conference contribution

Semantic-Driven CEP for Delivery of Information Streams in Data-Intensive Monitoring Systems
Research output: Scientific › peer-review › Conference contribution
Adaptive mobile tracking in unknown non-line-of-sight conditions with application to digital TV networks
Research output: Scientific - peer-review › Article

Analysis by Simulation of Different Control Algorithms of A Digital Hydraulic Two-Actuator System
Research output: Scientific - peer-review › Article

Analysis of Real-Time Properties of a Digital Hydraulic Power Management System
Research output: Scientific - peer-review › Conference contribution

Analysis of signals and power flow in a digital hydraulic multi actuator application
Research output: Scientific - peer-review › Conference contribution

A New Flexible Augmented Reality Platform for Development of Maintenance and Educational Applications
Research output: Scientific - peer-review › Article

Aspects of the energy consumption of a digital hydraulic power management system supplying a digital and proportional valve controlled multi actuator system
Research output: Scientific - peer-review › Conference contribution

Augmented reality aiding collimator exchange at the LHC
Research output: Scientific - peer-review › Article

Automaattinen öljyn epäpuhtauksien mittaus ja keskeiset standardit
Research output: Professional › Conference contribution

Automated drop-on-fiber contact angle measurement using a microrobotic platform
Research output: Scientific - peer-review › Article

Characterizing Porous Ceramics by Frequency-Response Method
Research output: Scientific - peer-review › Conference contribution

Comparison of proportional control and displacement control using digital hydraulic power management system
Research output: Scientific - peer-review › Conference contribution
Constrained Path Optimization with Bézier Curve Primitives

Research output: Scientific - peer-review › Conference contribution

Digital Hydraulic Power Management System with Five Independent Outlets - Simulation Study of Displacement Controlled Excavator Crane

Research output: Scientific - peer-review › Conference contribution

Device Status Information Service Architecture for Condition Monitoring Using OPC UA

Research output: Scientific - peer-review › Conference contribution

Equal coded digital hydraulic valve system - improving tracking control with pulse frequency modulation

Research output: Scientific - peer-review › Conference contribution

Experimental Evaluation of Z-Directional Fibre-Fibre Bond Strength using Microrobotics

Research output: Scientific - peer-review › Conference contribution

Extracting Mobile Machine Routes from GPS Traces
Geometry-Aided Inversion of Manipulator Telescopic Link Length from MEMS Accelerometer and Rate Gyro Readings
Research output: Scientific - peer-review › Conference contribution

Geometry-Aided Low-Noise Angular Velocity Sensing of Rigid-Body Manipulator Using MEMS Rate Gyros and Linear Accelerometers
Research output: Scientific - peer-review › Conference contribution

Global Path Planning with Obstacle Avoidance for Omnidirectional Mobile Robot Using Overhead Camera
Research output: Scientific - peer-review › Conference contribution

Hydraulic Manipulator Virtual Decomposition Control with Performance Analysis Using Low-Cost MEMS Sensors
Research output: Scientific - peer-review › Conference contribution

Image-based Measurements of Paper Fibers for Automatic Manipulation
Research output: Scientific - peer-review › Conference contribution

Improving the performance of DTP2 bilateral teleoperation control system with haptic augmentation
Research output: Scientific - peer-review › Article

Inspections on Control Performance of a Digital Hydraulic Power Management System Supplying Digital and Proportional Valve Driven Multi-Actuator System
Research output: Scientific - peer-review › Conference contribution
Integrated microfluidic culture environments for in vitro cell studies
Research output: Scientific › Conference contribution

Integrating Robotic Software Frameworks for Convenient Software Component Exchange in Micro- and Nanoscale Applications
Research output: Scientific - peer-review › Conference contribution

Label-Free and Rapid Electrical Detection of hTSH with CMOS-Compatible Silicon Nanowire Transistor Arrays
Research output: Scientific - peer-review › Article

Measuring resistivity of silicon nanowire using pseudo-random binary sequence injection
Research output: Scientific - peer-review › Article

Mechatronic design of digital hydraulic micro valve package
Research output: Scientific - peer-review › Conference contribution

Model-Driven Development of Automation and Control Applications: Modelling and Simulation of Control Sequences
Research output: Scientific - peer-review › Article

Non-invasive System for Mechanical Arterial Pulse Wave Measurements
Research output: Scientific - peer-review › Conference contribution

Novel Procedure for Supporting Maintenance of Mobile Work Machines Using R&D Simulators
Research output: Scientific - peer-review › Conference contribution

On Design and Development of Super-FRS main tunnel Remote Handling System Concept
Research output: Scientific - peer-review › Conference contribution

Online monitoring of flue gas emissions in power plants having multiple fuels
Research output: Scientific - peer-review › Conference contribution

Photocontrol of Mechanical Properties of Pulp Fibers and Fiber-to-Fiber Bonds via Self-Assembled Polysaccharide Derivatives
Pneumatic cell stretching system for cardiac differentiation and culture
Research output: Scientific - peer-review › Article

Prediction of drive torque in hydraulic wheel loader
Research output: Scientific - peer-review › Conference contribution

Preliminary concept design of the divertor remote handling system for DEMO power plant
Research output: Scientific - peer-review › Article

Releasing tool-adhered natural fibrous microscale objects with vacuum system
Research output: Scientific - peer-review › Conference contribution

Robotic software frameworks and software component models in the development of automated handling of individual natural fibers
Research output: Scientific - peer-review › Article

Secure integration of the Home Energy Management System to the battery management system in the customer domain of the smart grid
Research output: Scientific - peer-review › Conference contribution

Semi-automatic Measurement of Microfibril Angle on a Microrobotic Platform
Research output: Scientific - peer-review › Conference contribution

Simulation-based design process for the verification of ITER remote handling systems
Research output: Scientific - peer-review › Article

Software fault detection and recovery in critical real-time systems: An approach based on loose coupling
Research output: Scientific - peer-review › Article

Stereo vision with consumer grade high resolution cameras for a micro air vehicle
Research output: Scientific - peer-review › Conference contribution

Stochastic control for maximizing mutual information in active sensing
Research output: Scientific - peer-review › Conference contribution
An Energy-Efficient High Performance Motion Control of a Hydraulic Crane Applying Virtual Decomposition Control
Research output: Scientific - peer-review › Conference contribution

A New Hybrid Approach for Augmented Reality Maintenance in Scientific Facilities
Research output: Scientific - peer-review › Article

An extended second order polynomial model for hydraulic fluid density
Research output: Scientific - peer-review › Conference contribution

A Novel Time Optimal Path Following Controller with Bounded Velocities for Mobile Robots with Independently Steerable Wheels
Research output: Scientific - peer-review › Conference contribution

Antimicrobial assay optimization and validation for HTS in 384-well format using a bioluminescent E. coli K-12 strain
Research output: Scientific - peer-review › Article

A positive tensions PID controller for a planar cable robot: An experimental study
Research output: Scientific - peer-review › Conference contribution

Arkkitehtuurinäkymät turvallisuuteen liittyvien järjestelmien kehityksessä
Research output: Scientific - peer-review › Conference contribution

A Track Following Stage Controller for HDD Servo System Using Reduced Order Controller with Integration
Research output: Scientific - peer-review › Conference contribution

Barkhausen kohina -mittauksen hyödyntäminen materiaaliominaisuuksien ennustamisessa
Research output: Scientific - peer-review › Conference contribution

Benefit from Simulating Early in MDE of Industrial Control
Research output: Scientific - peer-review › Conference contribution
Bounded-Velocity Motion Control of Four Wheel Steered Mobile Robots
Research output: Scientific - peer-review › Conference contribution

Breaking down the requirements: Reliability in remote handling software
Research output: Scientific - peer-review › Article

Broadband Methods for Online Grid Impedance Measurement
Research output: Scientific - peer-review › Conference contribution

Combining the Information of Unconstrained Electrocardiography and Ballistography in the Detection of Night-Time Heart Rate and Respiration Rate
Research output: Scientific - peer-review › Article

Computer-Assisted Bilateral Teleoperation System for Water Hydraulic Manipulator
Research output: Scientific - peer-review › Conference contribution

Control arrangement of an electro-hydraulic gas exchange valve actuation system
Research output: Scientific › Patent

Correlation approach for the detection of the heartbeat intervals using force sensors placed under the bed posts
Research output: Scientific - peer-review › Article

Design and analysis of secure integration solution for Smart grids
Research output: Scientific - peer-review › Conference contribution

Detection and isolation of faults in mobile hydraulic valves based on a reduced-order model and adaptive thresholds
Research output: Scientific - peer-review › Conference contribution

Digitaalihydrauliikan seminaarin satoa Tampereella
Linjama, M. 2013 In : Fluid Finland. 12, 1, p. 8-8 1 p.
Research output: Professional › Article
Displacement control of a mobile crane using a digital hydraulic power management system
Research output: Scientific - peer-review › Article

Divertor cassette locking system remote handling trials with WHMAN at DTP2
Research output: Scientific - peer-review › Article

Dynaamisten voimalaitosmallien parametrien määrittäminen ja virittäminen
Research output: Scientific - peer-review › Conference contribution

Dynamic modeling and simulation of cone crushing circuits
Research output: Scientific - peer-review › Article

Early design verification of ITER remote handling systems using Digital Mock-Ups within simulation lifecycle environment
Research output: Scientific - peer-review › Conference contribution

Energy Efficiency of Digital Hydraulic Valve Control Systems
Research output: Scientific - peer-review › Conference contribution

Enhancement of the use of digital mock-ups in the verification and validation process for ITER remote handling systems
Research output: Scientific - peer-review › Article

Euratom and EFDA Fusion Training Scheme, EFDA goal oriented training in remote handling -GOTRH
Research output: Professional › Commissioned report

Experiences of Online Measurements in Technical Cleanliness of Fluid Power System
Research output: Scientific - peer-review › Conference contribution

Extracting the respiration cycle lengths from ECG signal recorded with bed sheet electrodes
Research output: Scientific - peer-review › Conference contribution

Fault-tolerant scheduling of stateful tasks in uniprocessor real-time systems
Research output: Scientific - peer-review › Conference contribution
Fusion for Energy and ITER Activities, Divertor RH design updates and DTP2 Phase 2 testing
Siuko, M., Järvenpää, J. & Mattila, J. 2013 VTT. 5 p. (VTT Science 3; vol. 30)
Research output: Professional › Commissioned report

Generic Microcontroller Board for Automated Heavy Machinery with Modular Control System
Research output: Scientific - peer-review › Conference contribution

Geometry-Aided Angular Acceleration Sensing of Rigid Multi-Body Manipulator Using MEMS Rate Gyros and Linear Accelerometers
Research output: Scientific - peer-review › Conference contribution

Geometry-Aided MEMS Motion State Estimation for Multi-Body Manipulators
Research output: Scientific - peer-review › Conference contribution

Huokoisen keraamin karakterisointi sähköisellä herätteellä
Research output: Scientific - peer-review › Conference contribution

Hydraulic Energy Recovery in Displacement Controlled Digital Hydraulic System
Research output: Scientific - peer-review › Conference contribution

Improved energy efficiency and controllability of mobile work machines by reduced engine rotational speed
Research output: Scientific - peer-review › Conference contribution

Improving Asset Management: Plant Models Supported by Composite Services
Research output: Scientific - peer-review › Conference contribution

Indirect Particle Size Distribution Control in Cone Crushers
Research output: Scientific - peer-review › Conference contribution

Integration of Microfluidic System with Silicon Nanowires Biosensor for Multiplexed Detection
Internal leakage fault detection for variable displacement axial piston pump

Interoperability of remote handling control system software modules at Divertor Test Platform 2 using middleware

Introduction to Fast Frequency-Response Measurement in Micro and Nano Technology

Kohli automaatista yksittäisten paperikuitujen manipulointia

Koulutuksen ytimessä

Making sense of information security in real time automation - information flow approach

Mass-Flow Estimation in Mineral-processing Applications

Measuring Resistive Characteristics of Silicon Nanowire by Applying Electrostatic Tensile Device and Broadband Test Signal

MEMS-based State Feedback Control of Multi-Body Hydraulic Manipulator

MEMs sensor network based anti-sway control system for articulated hydraulic crane
Path Planning in Dynamic Environments with the Partially Observable Canadian Traveller's Problem
Research output: Scientific - peer-review › Conference contribution

Patterns for Light-Weight Fault Tolerance and Decoupled Design in Distributed Control Systems
Research output: Scientific - peer-review › Conference contribution

Patterns in Safety System Development
Research output: Scientific - peer-review › Conference contribution

Planning for multiple measurement channels in a continuous-state POMDP
Research output: Scientific - peer-review › Article

Polttoainekulut kuriin
Research output: Professional › Article

Position-Based Visual Servoing for Pallet Picking by an Articulated-frame-steering Hydraulic Mobile Machine
Research output: Scientific - peer-review › Conference contribution

Potential of full-web imaging in measuring web structure on-line
Research output: Scientific - peer-review › Article

Proceedings of Automaatio XX-seminaari, Automation and systems without borders - beyond future, 21.-22.5.2013, Helsinki
Vilkko, M. (ed.) 2013 Suomen Automaatioseura ry. 1 p. (SAS julkaisusarja)
Research output: Scientific - peer-review › Anthology

Projektilähtöinen työkurssi osana ei-parametrisen mallinnuksen opetusmenetelmää
Research output: Scientific - peer-review › Conference contribution
Real-Time Service-Oriented Architectures: A Data-Centric Implementation for Distributed and Heterogeneous Robotic System
Research output: Scientific - peer-review › Conference contribution

Recognition of Operating States of a Medium-Sized Mobile Machine
Research output: Scientific - peer-review › Conference contribution

Recognition of Operating States of a Wheel Loader for Diagnostics Purposes
Research output: Scientific - peer-review › Article

Reliability of operating window identified from process data
Research output: Scientific - peer-review › Article

Reliability requirements management for ITER Remote Handling maintenance systems
Research output: Scientific - peer-review › Article

Remote Handling Control System for Water Hydraulic Mover
Research output: Scientific - peer-review › Conference contribution

Scale and Rotation Invariant Two View Microgripper Detection that Uses a Planar Pattern
Research output: Scientific - peer-review › Conference contribution

Semantics enhanced engineering and model reasoning for control application development
Hästbacka, D. & Kuikka, S. 2013 In : Multimedia Tools and Applications. 65, 1, p. 47-62
Research output: Scientific - peer-review › Article

Simulation-Based Development of Safety Related Interlocks
Research output: Scientific - peer-review › Chapter

Stable and high performance energy-efficient motion control of electric load sensing controlled hydraulic manipulators
Research output: Scientific - peer-review › Conference contribution
Super-FRS target area remote handling: Scenario and development
Research output: Scientific - peer-review › Article

Survey and Introduction to the Focused Section on Mechatronics for Sustainable and Resilient Civil Infrastructure
Research output: Scientific - peer-review › Review Article

Survey on Remote Handling Logistics for Super-FRS Regular Paper
Research output: Scientific - peer-review › Article

Suunnittelumallien hyödyntäminen suunnittelutyössä ja oppimisessa
Research output: Scientific - peer-review › Conference contribution

Teollisuusvoimalaitoksen liukuva vastapaineen säätö
Research output: Scientific - peer-review › Conference contribution

Test bench for measuring technical cleanliness of assembled fluid power components
Research output: Scientific - peer-review › Conference contribution

Text entry by gazing and smiling
Research output: Scientific - peer-review › Article

The 2nd Competition on Counter Measures to 2D Face Spoofing Attacks
Research output: Scientific - peer-review › Conference contribution

The Automation of Multi Degree of Freedom Hydraulic Crane by Using Virtual Decomposition Control
Research output: Scientific - peer-review › Conference contribution

Three-dimensional calibration of micromanipulators using stereo vision
Research output: Scientific - peer-review › Article
Towards Fully Automated Pick and Place Operations of Individual Natural Fibers
Research output: Scientific - peer-review › Conference contribution

Washing Durability of Embroidered Polymer Coated RFID Tags
Research output: Scientific - peer-review › Conference contribution

Web-wide imaging of paper; Analyzing the potential of on-line light transmittance measurement in quality control and diagnostics of paper
Research output: Scientific - peer-review › Article

Work and Learning of Automation Expert in Industry
Research output: Scientific › Conference contribution

Divertor RH design updates and DTP2 Phase 2 testing
Siuko, M., Järvenpää, J. & Mattila, J. 2012 VALTION TEKNILLINEN TUTKIMUSKESKUS. 8 p. (VTT Science; vol. 7)
Research output: Professional › Commissioned report

EFDA goal oriented training in remote handling - GOTRH
Research output: Professional › Commissioned report

Divertor RH design updates and DTP2 Phase 2 testing
Research output: Professional › Commissioned report

EFDA quality assurance exercise
Research output: Professional › Commissioned report

The design and development of iter divertor RH equipment @ DTP2 facility
Research output: Scientific - peer-review › Conference contribution