

Monday, 9 August 2021

Session Chair: Bertram

09:00h *Chenwei Gui, Zeng, Aoyama (The University of Tokyo), Takahashi, Herai, (Imabari Shipbuilding)

Creating Method of Standardized Specifications for Merchant Ship using Text Mining

09:25h *Chen, Qian Wei (DNV)

An AI-powered Corrosion Detection Solution for Maritime Inspection Activities

09:50h *Ashkan Rafiee, Van Someren, Ellery, Pretlove, Malcolm (Austal)

Predictive Motion Control of High-Speed Vessels

10:15h Coffee Break

Session Chair: Zerbst

10:45h Lars L. Mikkelsen, Stochholm (UCL)

The Need for an Updated Energy Decision Support System Framework when Retrofitting Ferries with Batteries - A Case Study

11:10h Roy de Winter, van Stein, Bäck (Leiden University), Muller (C-Job Naval Architects)

Ship Design Performance and Cost Optimization with Machine Learning

11:35h Sietske R.A. Moussault (TU Delft), Buis (VU Amsterdam), Koelman (NHL)

A Convolutional Neural Network Developed to Predict Speed Using Operational Data

12:00h Volker Bertram (DNV)

Robotic Hull Cleaning: Past, Present and Prospects

12:30h Lunch

Session Chair: Seppälä

13:30h Thomas Porathe (NTNU)

No-One in Control: Unmanned Control Rooms for Unmanned Ships?

13:55h Alina Colling, Van Delft, Peeten, Verbist, Wouters, Hekkenberg (TU Delft)

Assessing Semi-Autonomous Waterborne Platooning Success Factors in Urban Areas

14:20 *Stein Ove Erikstad (NTNU), Bekker (Stellenbosch University)

Service Design Patterns for Operational Intelligence based on Digital Twins: Combining Physics and Data Science for Industrial Applications

14:40h *Announcement of Compit 2022 & Compit Award 2021 given to Ludmila Seppälä*

14:45h Coffee Break

Session Chair: Bertram

15:15h *Pauline Bellingmo, Pobitzer, Jørgensen, Berge (SINTEF)

Energy Efficient and Safe Ship Routing using Machine Learning Techniques on Operational and Weather Data

15:40h *Dag Atle Nesheim, Bernsmed, Von Zernichow, Rødseth, Meland (SINTEF)

Secure, Trustworthy and Efficient Information Exchange: Enabling Added Value through the Maritime Data Space and Public Key Infrastructure

16:05h *Marianne Hagaseth (SINTEF), Tagne (Norwegian Coastal Administration), Voirand (Telespazio France), Nicolosi, Garbellano (e-GEOS)

Improved Arctic e-Navigation by Using Earth Observation Products

16:30h *Jon S. Daehlen, Sandvik, Riialand (SINTEF)

A Method for Evaluating Ship Concepts in Realistic Operational Scenarios using Agent-based Discrete-Event Simulation

Tuesday, 10 August 2021

Session Chair: Koelman

- 09:00h Ludmila Seppälä (Cadmatic)
3D Model: Technology Island in Ship Design or Central Piece for Shipbuilding Project Data?
- 09:25h Marius Blom, Marcin Czapla (Blom Maritime)
Direct Integration of 3D Scanning in CAD
- 09:50h Francesco Delre (FD Quadro)
SHIP - Ship Holistic Integration Platform
- 10:15h Albert, Hildebrandt (Numeca), Stefan Harries, Bergmann (Friendship Systems), Kovacic (Yachtwerft Meyer)
Parametric Modeling and Hydrodynamic Optimization of an Electric Catamaran Ferry based on Radial Basis Functions for an Intuitive Set-up

10:40h Coffee Break

Session Chair: Abels

- 11:10h Rodrigo Pérez, Muñoz, Ramírez (SENER)
Artificial Intelligence Entering Maritime CAD/ CAM
- 11:30h David Thomson (Aveva)
Data in Shipyard and Vessel Operations
- 12:00h Carsten Zerbst (Prostep)
Deming Cycle Enabled: A Digital Twin for Ship Production

12:30h Lunch

Session Chair: Harries

- 13:30h Volker Bertram (DNV)
Visions Far Ahead of Reality
- 13:55h Sathiya K. Renganayagalu (University of South-Eastern Norway)
Eye-Tracking in Maritime Training: New Performance Measures for Immersive Virtual Reality Training Applications
- 14:20h Friedewald, Nina Köster, Elzalabany (TU Hamburg)
Scheduling and Visualization of Acceptance Tests and their Dependencies for an Augmented Reality-based Commissioning Assistance System

14:45h Coffee Break

Session Chair: Perez

- 15:15h Herbert J. Koelman (NHL), Moussault (TU Delft)
School's in!
- 15:40h Dejan Zagar, Dimc (University of Ljubljana)
Digital Maritime Training Supported by Biometrical Measurement
- 16:05h Tufail Shahzad, Hoffmans (MasterShip Software)
KBE/AI for Ship Construction: A Feasibility Study

Conference Dinner

- 18:00 h Webster's Brauhaus (5 km from kath. Akademie)
Dellpl. 14
47051 Duisburg
(take taxi or public transport at own expense)