

State-of-the-Art Digital Twin Applications for Shipping Sector Decarbonization

Part of the Advances in Logistics, Operations, and Management Science Book Series

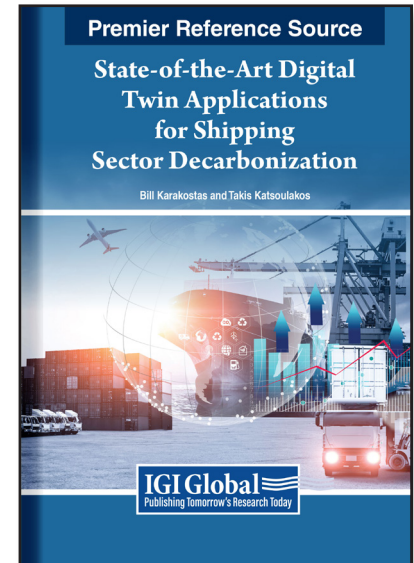
Bill Karakostas (Inlecom Systems Ltd, UK) and Takis Katsoulakos (Inlecom Systems Ltd, UK)

Description:

The shipping industry, responsible for approximately 3% of global greenhouse gas emissions, urgently needs decarbonization to combat climate change. Traditional approaches to reducing emissions have yet to achieve significant, sustainable results. Maritime businesses and naval engineers need innovative solutions to meet ambitious emissions reduction targets and regulatory requirements.

State-of-the-Art Digital Twin Applications for Shipping Sector Decarbonization offers a groundbreaking solution to the challenges of shipping decarbonization. By focusing on integrating digital twin technologies, this book presents a new paradigm for enhancing operational efficiency, reducing environmental impact, and meeting regulatory compliance. Through digital twins, maritime businesses can gain valuable insights into their operations, optimize energy consumption, and develop sustainable practices.

State-of-the-Art Digital Twin Applications for Shipping Sector Decarbonization provides a state-of-the-art review of digital twin technologies and their applications in the shipping industry. The book covers various topics, from conceptual frameworks to practical implementations, including digital twin model representation, management, and applications in ship operations and design. It also explores the use of digital twins in the development of renewable technologies and installation onboard ships. By offering insights from EU-funded research and real-world case studies, this book is invaluable for researchers, naval engineers, and maritime professionals seeking to drive sustainability and innovation in the shipping industry.



ISBN: 9781668498484

Pages: 310

Copyright: 2024

Release Date: April, 2024

Hardcover: \$165

E-Book: \$165

Topics Covered:

- Big Data
- Digital Twin Applications
- Digital Twin Model Representation
- Digital Twin Platforms
- Digital Twin Technologies
- Emerging Digital Technologies
- Machine Learning
- Renewable Technologies
- Ship Design
- Ship Operations Management
- Shipping Decarbonization
- Sustainable Shipping
- Technology Development
- Technology Installation
- Technology Selection

Subject: Business & Management

Classification: Edited Reference

Readership Level: Advanced-Academic Level
(Research Recommended)

Research Suitable for: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

Order Information

Phone: 717-533-8845 x100

Toll Free: 1-866-342-6657

Fax: 717-533-8661 or 717-533-7115

Online Bookstore: www.igi-global.com

Mailing Address: 701 East Chocolate Avenue, Hershey, PA 17033, USA