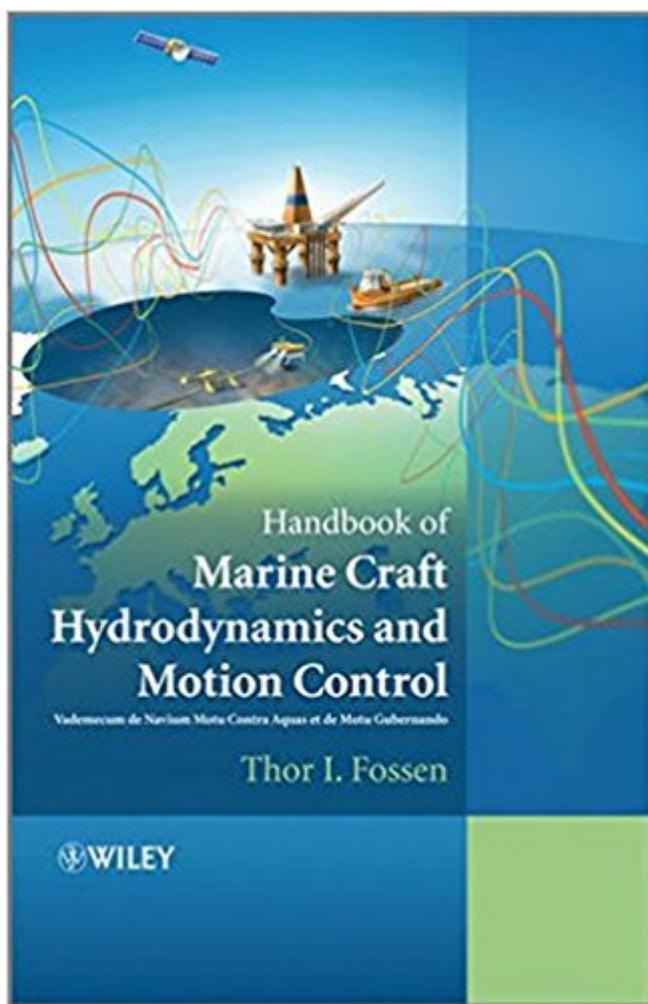**The book was found**

Handbook Of Marine Craft Hydrodynamics And Motion Control

Synopsis

The technology of hydrodynamic modeling and marine craft motion control systems has progressed greatly in recent years. This timely survey includes the latest tools for analysis and design of advanced guidance, navigation and control systems and presents new material on underwater vehicles and surface vessels. Each section presents numerous case studies and applications, providing a practical understanding of how model-based motion control systems are designed. Key features include: a three-part structure covering Modeling of Marine Craft; Guidance, Navigation and Control Systems; and Appendices, providing all the supporting theory in a single resource kinematics, kinetics, hydrostatics, seakeeping and maneuvering theory, and simulation models for marine craft and environmental forcesÂ guidance systems, sensor fusion and integrated navigation systems, inertial measurement units, Kalman filtering and nonlinear observer design for marine craft state-of-the-art methods for feedback control more advanced methods using nonlinear theory, enabling the user to compare linear design techniques before a final implementation is made. linear and nonlinear stability theory, and numerical methodsÂ companion website that hosts links to lecture notes and download information for the Marine Systems Simulator (MSS) which is an open source Matlab/SimulinkÂ® toolbox for marine systems. The MSS toolbox includes hydrodynamic models and motion control systems for ships, underwater vehicles and floating structures With an appropriate balance between mathematical theory and practical applications, academic and industrial researchers working in marine and control engineering aspects of manned and unmanned maritime vehicles will benefit from this comprehensive handbook. It is also suitable for final year undergraduates and postgraduates, lecturers, development officers, and practitioners in the areas of rigid-body modeling, hydrodynamics, simulation of marine craft, control and estimation theory, decision-support systems and sensor fusion. www.wiley.com/go/fossen_marine

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I found the matrix math in this book very interesting; it really builds to a comprehensive solution. All-in-all, one of the more interesting texts I've read since college.

This is an excellent book on its topic, but the implementation of the e-book is not particularly good.

Equations have poor resolution, equation numbering is not in line with the equations and some links seem to be missing. All in all I really recommend the book itself, but order the paper version, not the e-book.

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