This book contains a selection of articles from The 2015 World Conference on Information Systems and Technologies (WorldCIST'15), held between the 1st and 3rd of April in Funchal, Madeira, Portugal, a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges of modern Information Systems and Technologies research, technological development and applications. The main topics covered are: Information and Knowledge Management; Organizational Models and Information Systems; Intelligent and Decision Support Systems; Big Data Analytics and Applications; Software Systems, Architectures, Applications and Tools; Multimedia Systems and Applications; Computer Networks, Mobility and Pervasive Systems; Human-Computer Interaction; Health Informatics; Information Technologies in Education; Information Technologies in Radio communications.

This course should be taken by every prospective seafarer. It covers training in personal survival techniques and is based on the provisions of table A-VI/1-1 of the STCW Code.

This book focuses on the importance of human factors in optimizing the learning and training process. It reports on the latest research and best practices and discusses key principles of behavioral and cognitive science, which are extremely relevant to the design of instructional content and new technologies to support mobile and multimedia learning, virtual training and web-based learning, among others, as well as performance measurements, social and adaptive learning and many other types of educational technologies, with a special emphasis on those important in the corporate, higher education, and military training contexts. Based on the AHFE 2017 Conference on Human Factors in Training, Education, and Learning Sciences, held July 17–21, 2017 in Los Angeles, California, the book offers a timely perspective on the role of human factors in education. It highlights important new ideas and will foster new discussions on how to optimally design learning experiences.
Vocational education and training (VET) plays a central role in preparing young people for work, developing the skills of adults and responding to the labour-market needs of the economy. Teachers and leaders in VET can have an immediate and positive influence on learners’ skills, employability and career development.

Constrained budgets and increasing costs have forced the U.S. Navy to search for ways to reduce the annual operating costs of the fleet. One expensive driver of those costs is underway training of surface combatant ship crews. Focusing on the DDG-51 Arleigh Burke-class of surface combatants, RAND examines whether and how increased use of simulators could be substituted for underway training without any decrease in readiness.

This book presents the proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018), held on August 26–30, 2018, in Florence, Italy. By highlighting the latest theories and models, as well as cutting-edge technologies and applications, and by combining findings from a range of disciplines including engineering, design, robotics, healthcare, management, computer science, human biology and behavioral science, it provides researchers and practitioners alike with a comprehensive, timely guide on human factors and ergonomics. It also offers an excellent source of innovative ideas to stimulate future discussions and developments aimed at applying knowledge and techniques to optimize system performance, while at the same time promoting the health, safety and wellbeing of individuals. The proceedings include papers from researchers and practitioners, scientists and physicians, institutional leaders, managers and policy makers that contribute to constructing the Human Factors and Ergonomics approach across a variety of methodologies, domains and productive sectors. This volume includes papers addressing Organizational Design and Management.

Contemporary time has seen alarming environmental revolt that is calls for attention and concern about the biosphere world, a condition that calls for need to use advantage of human improved knowledge and civilization in science engineering to develop proactive, efficient and predictive based system that meet reliability and sustainability requirement as well to reduce uncertainty components of system design. Proactive based philosophy under safety and environmental framework should be exercise on all level of system life cycle, including design, construction, operation and disposal. Selection of all element of the life cycle should be responsibly done and pollution impact of the system to the environment and community should be mitigated. The book present application of risk and reliability analysis to various cases of marine system and subsystem, application of risk method ranging from qualitative, quantitative to simulation and analytical approach is presented.

Safety of Sea Transportation is the second of two Conference Proceedings of TransNav 2017, June 21-23 in Gdynia, Poland. Safety of Sea Transportation will focus on the following themes: Sustainability, intermodal and multimodal transportation Safety and hydrodynamic study of hydrotechnical structures Bunkering and fuel consumption Gases emission, water pollution and environmental protection Occupational accidents Supply chain of blocks and spare parts Electrotechnical problems Ships stability and loading strength Cargo loading and port operations Maritime Education and Training (MET) Human factor, crew manning and seafarers problems Economic analysis Mathematical models, methods and algorithms Fishery Legal aspects Aviation

Real-time, interactive ship simulators limped onto the scene, in the wake of flight simulators, some years ago. The maritime industries have a long history of conservatism, but this is now changing rapidly. The information age has also swept over ships and shipping, and has been taken to heart to such an extent that, for example, flight simulators now cooperate with ship simulators and import useful new concepts and methodologies. The more than 50 papers contained in this book show what and why. Although traditionally conservative, the marine world is also traditionally international and this has not changed. The papers in the book are by leading authors from all over the world and provide a detailed snap-shot of the rapidly advancing state-of-the-art, together with pointers to the future. The overall theme of MARSIM ’96 and therefore also of this book is: Vessel manouevrability and marine simulation research, training and assessment, and includes original papers on topics such as bridge resource management, distant learning and simulators coupled via The Internet, virtual reality, neural networks, rudder-propeller hydrodynamics, prime mover models, squat in shallow water, and many more.

Simulation continues to be a growth area in transportation human factors. From empirical studies in the laboratory to the latest training techniques in the field, simulators offer myriad benefits for the experimenter and the practitioner. This book draws together current trends in research and training simulators for the road, rail, air and sea sectors to inform the reader how to maximize both validity and cost-effectiveness in each case. Simulators for Transportation Human Factors provides a valuable resource for both researchers and practitioners in transportation human factors on the use of simulators, giving readers concrete examples and case studies of how simulators have been developed and used in empirical research as well as training applications. It offers useful and usable information on the functional requirements of simulators without the need for any background knowledge on the technical aspects, focusing on the state of the art of research and applications in transport simulators rather than the state of the art of simulation technology. The book covers simulators in operational terms instead of task simulation/modelling and provides a useful balance between a bottom-up, academic approach and a top-down, practical perspective.

In this book, author Nate Furuta, former chair and CEO of Toyota Boshoku America Inc., shares the story of his decades of experience directly leading the establishment of Toyota cultures outside Japan. Furuta was the first Toyota employee on the ground at New United Motor Manufacturing Inc. (NUMMI), Toyota’s joint venture in California with General Motors, where he directly led the establishment of the most revolutionary labor-management agreement in the history of the US auto industry. In addition, Furuta was the first Toyota employee on the ground in Georgetown Kentucky at Toyota’s first full-scale, wholly owned manufacturing operation outside Japan, where he led (working directly with President Fujio Cho) the establishment of Toyota’s general management systems and culture there. This book tells the stories of establishing successful operations in those two iconic organizations as well as others. Furuta reveals details, both stories and process descriptions that only he can tell. He takes you along as he and others lead Toyota’s intense globalization from the early 1980s to recent days. He introduces you to the critical leaders in Toyota's history, such as Taiichi Ohno and Fujio Cho as well as Kenzo Tamai, the head of the company's HRM function in the 1980s. This book is not about human-resource management (HRM) policies and procedures. It provides a deep dive into the way senior leaders embody deep awareness of HRM matters, developing and executing company strategy while at the same time
developing organizational capability. The role of senior leaders isn’t just a matter of directing the company to achieve objectives; it is a matter of building the capability to achieve those objectives, consistently, and further developing capability as it executes. Key to this is to develop the awareness, attitude, capability, and practice of identifying problems as progress is made toward achieving objectives, which is, in fact, attained through steadily eliminating each problem as it arises. This becomes a self-reinforcing loop of the organization, tapping in to the essence of solving problems while simultaneously developing ever better problem-solving skills and better problem solvers. This loop propels an organization toward meeting its purpose while developing capability for capability development. Essentially, this book reveals Toyota’s general management systems from the firsthand experience of a Toyota Japanese senior manager and describes, with stories and process examples, the attitude, behaviors, and systems needed to successfully establish and lead in a true Lean business environment.

Ship Hydrostatics and Stability is a complete guide to understanding ship hydrostatics in ship design and ship performance, taking you from first principles through basic and applied theory to contemporary mathematical techniques for hydrostatic modeling and analysis. Real life examples of the practical application of hydrostatics are used to explain the theory and calculations using MATLAB and Excel. The new edition of this established resource takes in recent developments in naval architecture, such as parametric roll, the effects of non-linear motions on stability and the influence of ship lines, along with new international stability regulations. Extensive reference to computational techniques is made throughout and downloadable MATLAB files accompany the book to support your own hydrostatic and stability calculations. The book also includes definitions and indexes in French, German, Italian and Spanish to make the material as accessible as possible for international readers. Equips naval architects with the theory and context to understand and manage ship stability from the first stages of design through to construction and use. Covers the prerequisite foundational theory, including ship dimensions and geometry, numerical integration and the calculation of heeling and righting moments. Outlines a clear approach to stability modeling and analysis using computational methods, and covers the international standards and regulations that must be kept in mind throughout design work. Includes definitions and indexes in French, German, Italian and Spanish to make the material as accessible as possible for international readers.