Preface

This book provides an exploration on how ergonomics can contribute to the solution of important societal and engineering challenges. Advances in Social and Organizational Factors discusses the optimization of sociotechnical systems, including their organizational structures, policies, and processes. It includes coverage of communication, crew resource management, work design, design of working times, teamwork, participatory design, community ergonomics, cooperative work, new work paradigms, organizational culture, virtual organizations, telework, and quality management.

This book provides research on urban infrastructures and how to shape urban spaces, including stadiums and museums. It covers warning systems in cars, voice-based interfaces, and the positive effects on manufacturing processes available from health informatics and management systems. Several chapters examine the role human factors can play in counterterrorism efforts and in interpreting deceptive behaviors. They provide suggestions on how to improve enterprise resource planning systems and stress the importance of lifelong learning, personalized learning, and work–life balance. This book also highlights the issues with special populations, detailing how to design and adapt products and work situations for these groups. In addition to exploring the challenges faced by optimizing sociotechnical systems, this book underlines themes that play a role in all the challenges and how they are linked to each other. It concludes with an exploration of emotional ergonomics and the important positive effects of making people happy and healthy. With chapter authors from around the globe, this book supplies a broad look at current challenges and possible solutions. This book contains a total of six parts that covers the following topics.

Part I: Macroergonomic Systems
Part II: Social and Occupational Innovation
Part III: Modeling and Systems in Occupational Ergonomics
Part IV: Job Satisfaction, Workload and Musculoskeletal Disorders
Part V: Accidents and Safety
Part VI: Social and Organizational Factors in Industry
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We hope this book will contribute to the knowledge in the field of social and organizational Ergonomics and that readers find the contributions in this book interesting and helpful.

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Richard H.M. Goossens
Advances in Social & Occupational Ergonomics