

Preface

Welcome to the proceedings of the second international conference, AsiaHaptics 2016, held in Chiba, Japan, during November 29 through December 1.

AsiaHaptics is a new type of international conference for the haptics fields, featuring interactive presentations with demos. The conference became the place to experience 90 live demonstrations of haptics research.

While the haptics-related research field is huge, this book divided it into six parts.

Part I is composed of eight chapters, treating perception and psychophysics of haptics. They are undoubtedly the basis of the haptics research.

Part II is composed of 23 chapters, treating tactile devices for skin sensation such as vibration, pressure, and temperature, and their rendering methods.

Part III is composed of 18 chapters, treating force feedback devices and rendering methods. Some of them utilized tactile-based illusions so the distinction between tactile devices and force feedback devices is vague.

Part IV is composed of five chapters, treating sensors such as pressure distribution sensor and force sensor, many of which enable novel applications.

Part V is composed of six chapters, treating medical application including surgery simulation and rehabilitation.

Part VI is composed of 24 chapters, treating application of haptics to VR, telepresence, and multimedia, all exploring new application area of haptics.

This book helps not only active haptic researchers, but also general readers to understand what is going on in this interdisciplinary area of science and technology. All papers have accompanied videos available online. Therefore, readers can easily understand the concept of the work with the supplemental videos.

Yokohama, Japan
Sendai, Japan
Daejeon, Korea (Republic of)
Tokyo, Japan
Tokyo, Japan
December 2016

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Haptic Interaction

Science, Engineering and Design

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