

Preface

This book is based on my habilitation thesis and by that on selected essential research application examples added by explanatory chapters made during the period of my habilitation at the Institute for Human–Machine Communication of the Technische Universität München (TUM) in Munich, Germany, to obtain the German state doctorate (*fakultas docendi*) and private lectureship (*venia legendi*, German PD) in the subject area of Signal Processing and Machine Intelligence. A representative selection of application examples was made basing on coverage of the broader field, scientific relevance and recency. The book further includes knowledge and findings of research conducted and lectures held during this period at TUM, the CNRS LIMSI’s Spoken Language Processing Group in Orsay, France, the Imperial College London’s Department of Computing in London, UK, the Università Politecnica delle Marche in Ancona, Italy and the National ICT Australia in Sydney, Australia.

The aim is to provide a handbook that can be read from the beginning to the end, structured into methods and examples of their application. Reference to the original research is repeatedly made throughout, such that the interested reader is referred to these, as well as to further reading from myself and my colleagues or further research in the field. By that, the book introduces a broader view on and new avenues towards the computational and ‘intelligent’ analysis of audio aiming at the higher goal of lending machines the ability to listen to and understand arbitrary and complex compounds of speech, music and sound.

Gilching, December 2012

Björn W. Schuller



<http://www.springer.com/978-3-642-36805-9>

Intelligent Audio Analysis

Schuller, B.W.

2013, XXVIII, 345 p., Hardcover

ISBN: 978-3-642-36805-9