

1. Record Nr.	UNINA9910137204103321
Autore	Petri Laukka
Titolo	Expression of emotion in music and vocal communication // topic editors Anjali Bhatara, Petri Laukka and Daniel J. Levitin
Pubbl/distr/stampa	Frontiers Media SA, 2014 Switzerland : , : Frontiers Media SA, , 2014
ISBN	9782889192632 (ebook)
Descrizione fisica	1 online resource (294 pages) : illustrations, charts
Collana	Frontiers Research Topics
Soggetti	Music Philosophy Music Music, Dance, Drama & Film
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	Two of the most important social skills in humans are the ability to determine the moods of those around us, and to use this to guide our behavior. To accomplish this, we make use of numerous cues. Among the most important are vocal cues from both speech and non-speech sounds. Music is also a reliable method for communicating emotion. It is often present in social situations and can serve to unify a group's mood for ceremonial purposes (funerals, weddings) or general social interactions. Scientists and philosophers have speculated on the origins of music and language, and the possible common bases of emotional expression through music, speech and other vocalizations. They have found increasing evidence of commonalities among them. However, the domains in which researchers investigate these topics do not always overlap or share a common language, so communication between disciplines has been limited. The aim of this Research Topic is to bring together research across multiple disciplines related to the production and perception of emotional cues in music, speech, and non-verbal vocalizations. This includes natural sounds produced by human and non-human primates as well as synthesized sounds. Research methodology can include survey, behavioral, and neuroimaging

techniques investigating adults as well as developmental populations, including those with atypical development. Studies using laboratory tasks as well as studies in more naturalistic settings are encouraged.

2. Record Nr.	UNINA9910299775903321
Autore	Ohtsu Kohei
Titolo	Time Series Modeling for Analysis and Control : Advanced Autopilot and Monitoring Systems // by Kohei Ohtsu, Hui Peng, Genshiro Kitagawa
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2015
ISBN	4-431-55303-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (127 p.)
Collana	JSS Research Series in Statistics, , 2364-0065
Disciplina	519.55
Soggetti	Statistics Mathematical statistics - Data processing Statistics in Engineering, Physics, Computer Science, Chemistry and Earth Sciences Statistics and Computing Statistical Theory and Methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Ch1 Introduction (1.1 Necessity of Statistical Modeling for Complex, Large Systems -- 1.2 Model of Ship Motion and Main Engine -- 1.3 Experimental Ships and Outline of Topics Discussed in Remaining Chapters) -- Ch2 Time Series Analysis through AR Modeling (2.1 Univariate Time Series Analysis through AR Modeling -- 2.2 Analysis of Ship Motion through Univariate AR Modeling -- 2.3 Multivariate AR Modeling of Controlled Systems -- 2.4 Power Contribution Analysis of a Feedback System -- 2.5 State-Space Model and Kalman Filter -- 2.6 Piecewise Stationary Modeling -- 2.7 Model-Based Monitoring System -- 2.8 RBF-ARX Modeling for a Nonlinear System) -- Ch3 Design of a Model-Based Autopilot System for Course Keeping Motion (3.1 Statistical Optimal Controller Based on the ARX Model -- 3.2 AR Model-Based Autopilot System -- 3.3 Rudder-Roll Control System -- 3.4

Application to the Marine Main Engine Governor System) -- Ch4
Advanced Autopilot Systems (4.1 Noise-Adaptive Autopilot System --
4.2 RBF-ARX Model-Based Predictive Control -- 4.3 GPS Signal-Based
Computation of a Ship's Tracking Error and Course Deviation -- 4.4
Tracking Control Approach to Marine Vehicles).

Sommario/riassunto

This book presents multivariate time series methods for the analysis and optimal control of feedback systems. Although ships' autopilot systems are considered through the entire book, the methods set forth in this book can be applied to many other complicated, large, or noisy feedback control systems for which it is difficult to derive a model of the entire system based on theory in that subject area. The basic models used in this method are the multivariate autoregressive model with exogenous variables (ARX) model and the radial bases function net-type coefficients ARX model. The noise contribution analysis can then be performed through the estimated autoregressive (AR) model and various types of autopilot systems can be designed through the state-space representation of the models. The marine autopilot systems addressed in this book include optimal controllers for course-keeping motion, rolling reduction controllers with rudder motion, engine governor controllers, noise adaptive autopilots, route-tracking controllers by direct steering, and the reference course-setting approach. The methods presented here are exemplified with real data analysis and experiments on real ships. This book is highly recommended to readers who are interested in designing optimal or adaptive controllers not only of ships but also of any other complicated systems under noisy disturbance conditions.
