1. Record Nr. UNINA9910438056603321

Autore	Wu Rong
Titolo	Precision instrumentation amplifiers and read-out integrated circuits / / Rong Wu, Johan H. Huijsing, Kofi A. A. Makinwa
Pubbl/distr/stampa	New York, NY, : Springer, 2012, c2013
ISBN	9786613935038 9781283622585 1283622580 9781461437314 1461437318
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (198 p.)
Collana	Analog circuits and signal processing
Altri autori (Persone)	HuijsingJohan H. <1938-> MakinwaKofi A. A
Disciplina	621.3815
Soggetti	Integrated circuits Signal processing
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 and index.
Nota di contenuto	Introduction -- Dynamic Offset Cancellation Techniques for Operational Amplifiers -- Current-Feedback Instrumentation Amplifiers and Gain Accuracy Improvement Techniques -- A Chopper Instrumentation Amplifier with Offset Reduction Loop -- A Chopper Instrumentation Amplifier with Gain Error Reduction Loop -- Read-Out Integrated Circuits -- Conclusions.
Sommario/riassunto	This book presents innovative solutions in the design of precision instrumentation amplifier and read-out ICs, which can be used to boost millivolt-level signals transmitted by modern sensors, to levels compatible with the input ranges of typical Analog-to-Digital Converters (ADCs). The discussion includes the theory, design and realization of interface electronics for bridge transducers and thermocouples. It describes the use of power efficient techniques to mitigate low frequency errors, resulting in interface electronics with high accuracy, low noise and low drift. Since this book is mainly about techniques for eliminating low frequency errors, it describes the nature of these errors and the associated dynamic offset cancellation

	techniques used to mitigate them. Surveys comprehensively offset cancellation and accuracy improvement techniques applied in precision amplifier designs; Presents techniques in precision circuit design to mitigate low frequency errors in millivolt-level signals transmitted by modern sensors to analog-to-digital converters; Describes design of two stand-alone precision instrumentation amplifiers to drive an external ADC; Describes design of a read-out IC combining the instrumentation amplifier and the ADC into one chip.

2. Record Nr. UNINA9910483033803321

Titolo	Multimodal Technologies for Perception of Humans : International Evaluation Workshops CLEAR 2007 and RT 2007, Baltimore, MD, USA, May 8-11, 2007, Revised Selected Papers / / edited by Rainer Stiefelhagen, Rachel Bowers, Jonathan Fiscus
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2008
ISBN	3-540-68585-5
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (XIII, 558 p.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics, , 3004-9954 ; ; 4625
Altri autori (Persone)	StiefelhagenRainer BowersRachel FiscusJonathan
Disciplina	006.4
Soggetti	Pattern recognition systems Computer programming Application software Computer vision Artificial intelligence Computer graphics Automated Pattern Recognition Programming Techniques Computer and Information Systems Applications Computer Vision Artificial Intelligence Computer Graphics
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 and index.
Nota di contenuto	CLEAR 2007 -- The CLEAR 2007 Evaluation -- The AIT 3D Audio / Visual Person Tracker for CLEAR 2007 -- A Person Tracking System for CHIL Meetings -- An Appearance-Based Particle Filter for Visual Tracking in Smart Rooms -- Multi-level Particle Filter Fusion of Features and Cues for Audio-Visual Person Tracking -- Multispeaker Localization and Tracking in Intelligent Environments -- Multi-person Tracking Strategies Based on Voxel Analysis -- TUT Acoustic Source Tracking System 2007 -- The AIT 2D Face Detection and Tracking System for CLEAR 2007 -- PittPatt Face Detection and Tracking for the CLEAR 2007 Evaluation -- Tsinghua Face Detection and Tracking for CLEAR 2007 Evaluation -- The AIT Outdoor Tracker for Vehicles and Pedestrians in CLEAR2007 -- Objective Evaluation of Pedestrian and Vehicle Tracking on the CLEAR Surveillance Dataset -- Person and Vehicle Tracking in Surveillance Video -- UMD_VDT, an Integration of Detection and Tracking Methods for Multiple Human Tracking -- CLEAR'07 Evaluation of USC Human Tracking System for Surveillance Videos -- Speed Performance Improvement of Vehicle Blob Tracking System -- Vehicle and Person Tracking in Aerial Videos -- Person Tracking in UAV Video -- The AIT Multimodal Person Identification System for CLEAR 2007 -- Acoustic Speaker Identification: The LIMSI CLEAR'07 System -- MIT Lincoln Laboratory Multimodal Person Identification System in the CLEAR 2007 Evaluation -- Multichannel and Multimodality Person Identification -- ISL Person Identification Systems in the CLEAR 2007 Evaluations -- Robust Speaker Identification for Meetings: UPC CLEAR'07 Meeting Room Evaluation System -- Probabilistic Head Pose Tracking Evaluation in Single and Multiple Camera Setups -- Joint Bayesian Tracking of Head Location and Pose from Low-Resolution Video -- Learninga Person-Independent Representation for Precise 3D Pose Estimation -- Head Pose Estimation in Single- and Multi-view Environments - Results on the CLEAR'07 Benchmarks -- Head Orientation Estimation Using Particle Filtering in Multiview Scenarios -- The Acoustic Event Detector of AIT -- An HMM Based System for Acoustic Event Detection -- HMM-Based Acoustic Event Detection with AdaBoost Feature Selection -- Acoustic Event Detection: SVM-Based System and Evaluation Setup in CLEAR'07 -- TUT Acoustic Event Detection System 2007 -- RT 2007 -- The Rich Transcription 2007 Meeting Recognition Evaluation -- The CHIL RT07 Evaluation Data -- Shared Linguistic Resources for the Meeting Domain -- The 2007 AMI(DA) System for Meeting Transcription -- The IBM Rich Transcription 2007 Speech-to-Text Systems for Lecture Meetings -- The LIMSI RT07 Lecture Transcription System -- The SRI-ICSI Spring 2007 Meeting and Lecture Recognition System -- The ISL RT-07 Speech-to-Text System -- Progress in the AMIDA Speaker Diarization System for Meeting Data -- Speaker Diarization Using Direction of Arrival Estimate and Acoustic Feature Information: The I2R-NTU Submission for the NIST RT 2007 Evaluation -- The IBM RT07 Evaluation Systems for Speaker Diarization on Lecture Meetings -- The ICSI RT07s Speaker Diarization System -- The LIA RT'07 Speaker Diarization System -- Multi-stage Speaker Diarization for Conference and Lecture Meetings -- Speaker Diarization for Conference Room: The UPC RT07s Evaluation System.
Sommario/riassunto	This book constitutes the thoroughly refereed joint post-workshop proceedings of two co-located events: the Second International Workshop on Classification of Events, Activities and Relationships,

CLEAR 2007, and the 5th Rich Transcription 2007 Meeting Recognition evaluation, RT 2007, held in succession in Baltimore, MD, USA, in May 2007. The workshops had complementary evaluation efforts; CLEAR for the evaluation of human activities, events, and relationships in multiple multimodal data domains; and RT for the evaluation of speech transcription-related technologies from meeting room audio collections. The 35 revised full papers presented from CLEAR 2007 cover 3D person tracking, 2D face detection and tracking, person and vehicle tracking on surveillance data, vehicle and person tracking aerial videos, person identification, head pose estimation, and acoustic event detection. The 15 revised full papers presented from RT 2007 are organized in topical sections on speech-to-text, and speaker diarization.