Record Nr. UNINA9910760279503321 Autore Kalya Shubhakar **Titolo** Advances in VLSI, Signal Processing, Power Electronics, IoT, Communication and Embedded Systems [[electronic resource]]: Select Proceedings of VSPICE 2022 / / edited by Shubhakar Kalya, Muralidhar Kulkarni, Subramanya Bhat Singapore: .: Springer Nature Singapore: .: Imprint: Springer, . 2024 Pubbl/distr/stampa **ISBN** 981-9944-44-9 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (339 pages) Lecture Notes in Electrical Engineering, , 1876-1119; ; 1062 Collana Altri autori (Persone) KulkarniMuralidhar BhatSubramanya Disciplina 621.395 Soggetti Electronic circuits Signal processing **Telecommunication** Wireless communication systems Mobile communication systems **Electronic Circuits and Systems** Signal, Speech and Image Processing Communications Engineering, Networks Wireless and Mobile Communication Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Prototype for Parking Shield System Using Raspberry Pi -- Design and Nota di contenuto Implementation of Smart Waste Management System -- Multiplier Design for the Modulo Set and its Application in DCT for HEVC --Modelling performance analysis in VLSI testing methodologies --Verification of AHB2APB Bridge Protocol using UVM -- Design and Verification of AMBA AHB Protocol using UVM -- Dictowriter: Speech to Text Plotter -- Classification Performance Analysis of CART and ID3 Decision Tree Classifiers on Remotely Sensed Data -- Spectral Splitting

> of Speech Using Time Varying Comb Filters to Improve Speech Perception in Sensorineural Hearing Loss Subjects -- Soil Erosion Studies of Mangaluru Coastal Region Using Satellite Imageries and

Machine Learning Algorithms -- Denoising of ECG Signal using Optimized IIR Filter Architecture - A CSD Based Design -- Deep Learning Analysis for Skin Cancer Detection -- Design and Development of a BCI Framework to control a UTM using EEG Headset -- Approximate Compressors Based Multiplier for Image Processing and Neuromorphic Modelling -- Integration of Particle Swarm Optimization and Sliding Mode Control: A Comprehensive Review -- Design and Testing of a Solar Powered Automated Fruit and Vegetable Sorter -- Characterization of Dust Particles and their Impact on the Performance of Photovoltaic Panels: A Laboratory Investigation.

Sommario/riassunto

This book comprises select peer-reviewed papers from the International Conference on VLSI, Signal Processing, Power Electronics, IoT, Communication, and Embedded Systems (VSPICE-2022). The book provides insights into various aspects of electronics and communication engineering as a holistic approach. The various topics covered in this book include VLSI, embedded systems, signal processing, communication, power electronics, and the Internet of Things. The contents mainly focus on the most recent innovations, trends, concerns, and practical challenges and their solutions. This book is useful for academicians, professionals, and researchers in the area of electronics and communications and electrical engineering.