

1. Record Nr.	UNISA996418255803316
Titolo	Recent Advances in Mathematics and Technology [[electronic resource] ] : Proceedings of the First International Conference on Technology, Engineering, and Mathematics, Kenitra, Morocco, March 26-27, 2018 / / edited by Serge Dos Santos, Mostafa Maslouhi, Kasso A. Okoudjou
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2020
ISBN	3-030-35202-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XXI, 181 p. 53 illus., 47 illus. in color.)
Collana	Applied and Numerical Harmonic Analysis, , 2296-5009
Disciplina	511.8
Soggetti	Mathematical models Mathematical physics Fourier analysis Mathematical Modeling and Industrial Mathematics Mathematical Applications in the Physical Sciences Fourier Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I Mathematical Modeling -- The two-sided Gabor Quaternionic Fourier transform and uncertainty principles -- Reflected backward SDEs in a convex polyhedron -- On the energy decay of a nonhomogeneous hybrid system of elasticity -- Part II Advanced Mathematics for Imaging -- Advanced ground truth multimodal imaging using Time Reversal (TR) based Nonlinear Elastic Wave Spectroscopy (NEWS): medical imaging trends versus non-destructive testing applications -- A geometrically constrained manifold embedding for an extrinsic Gaussian process -- Numerical study of SIF for a crack in P265GH steel by XFEM -- Part III Computer Sciences and Smart Technologies -- Hardware acceleration of SVM training for real-time embedded systems: Overview -- Integrating intelligent tutoring system into an adaptive E-Learning process -- NDN VS TCP/IP: Which one is the best suitable for connected vehicles? -- A new optimization method to Enhance QoS in OLSR protocol -- Predictive analysis for

diabetes using Big Data classification.

---

Sommario/riassunto

The chapters in this volume are based on talks given at the inaugural Technology, Engineering and Mathematics Conference (TEM18), held from March 26 to 27, 2018 in Kenitra, Morocco. Advances in mathematical modeling, optimization, numerical analysis, signal processing, and computer science are presented by leading experts in these fields. There is a particular emphasis on stochastic analysis, machine learning algorithms, and deep learning models, which are highly relevant to the state-of-the-art in augmented, virtual, and mixed realities. Topics include: Harmonic analysis Big data analytics and applications Biomathematics Computer engineering and applications Economics and financial engineering Medical imaging and non-destructive testing This volume is ideal for engineers and researchers working in technological fields that need to be modeled and simulated using the tools of modern mathematics.

---