

1. Record Nr.	UNISALENTO991000126309707536
Autore	Gehrke, Hans-Joachim
Titolo	Stasis : Untersuchungen zu den inneren Kriegen in den griechischen Staaten des 5. und 4. Jahrhunderts v. Chr. / Hans-Joachim Gehrke
Pubbl/distr/stampa	Munchen : Beck, c1985
ISBN	3406080650
Descrizione fisica	x, 449 p. ; 24 cm.
Collana	Vestigia ; Bd. 35
Soggetti	Greece - Politics and government - To 146 B.C.
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes indexes. Bibliography: p. [379]-398

2. Record Nr.	UNINA9910820310603321
Autore	Burns Adam D.
Titolo	American imperialism : the territorial expansion of the United States, 1783-2013 // Adam Burns
Pubbl/distr/stampa	Edinburgh, [Scotland] : , : Edinburgh University Press, , 2017 ©2017
ISBN	1-4744-0216-X 1-4744-0215-1
Descrizione fisica	1 online resource (233 pages) : illustrations
Collana	BAAS Paperbacks
Disciplina	325.32
Soggetti	Imperialism Political science United States Foreign relations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Contents -- Figures -- Acknowledgements -- Introduction: Defining an Empire -- CHAPTER 1. Atlantic to Pacific (1783–1893) -- CHAPTER 2. Heading Northwards (1812–1903) -- CHAPTER 3. Leaving the Continent (1817–90) -- CHAPTER 4. A Two-Ocean Empire (1890–98) -- CHAPTER 5. Spanish Plunder (1898–1917) -- CHAPTER 6. An Empire among Equals (1899–1917) -- CHAPTER 7. Occupation over Annexation (1912–73) -- CHAPTER 8. Continuing Imperialism (1940–2013) -- Conclusion -- Bibliography -- Index
Sommario/riassunto	Provides a critical re-evaluation of US territorial expansionism and imperialism from 1783 to the presentThe United States has been described by many of its foreign and domestic critics as an “empire”. Providing a wide-ranging analysis of the United States as a territorial, imperial power from its foundation to the present day, this book explores the United States’ acquisition or long-term occupation of territories through a chronological perspective. It begins by exploring early continental expansion, such as the purchase of the Louisiana Territory from Napoleon Bonaparte in 1803, and traces US imperialism through to the controversial ongoing presence of US forces at Guantanamo Bay in Cuba. The book provides fresh insights into the

history of US territorial expansion and imperialism, bringing together more well-known instances (such as the purchase of Alaska) with those less-frequently discussed (such as the acquisition of the Guano Islands after 1856). The volume considers key historical debates, controversies and turning points, providing a historiographically-grounded re-evaluation of US expansion from 1783 to the present day.

**Key Features**Provides case studies of different examples of US territorial expansion/imperialism, and adds much-needed context to ongoing debates over US imperialism for students of both History and PoliticsAnalyses many of the better known instances of US imperialism (for example, Cuba and the Philippines), while also considering often-overlooked examples such as the US Virgin Islands, American Samoa and GuamExplores American imperialism from a “territorial acquisition/long-term occupation” viewpoint which differentiates it from many other books that instead focus on informal and economic imperialismDiscusses the presence of the US in key places such as Guantanamo Bay, the Panama Canal Zone and the Arctic

3. Record Nr.	UNINA9911020087903321
Autore	Anand Abhineet
Titolo	Simulation Techniques of Digital Twin in Real-Time Applications : Design Modeling and Implementation
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	9781394257003 1394257007 9781394256990 139425699X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (372 pages)
Altri autori (Persone)	SardanaAnita KumarAbhishek MohapatraSrikanta Kumar GuptaShikha
Disciplina	003/.3
Soggetti	Digital twins (Computer simulation)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Cover	--	Series Page	--	Title Page	--	Copyright Page	--	Dedication	--
Contents	--	Preface	--	Part 1: A Guide to Simulated Techniques in Digital Twin	--	Chapter 1 Introduction to Different Simulation Techniques of Digital Twin Development	--	1.1 Introduction	--
	--	1.2 Literature Review	--	1.3 Digital Twin Simulation Techniques	--	1.3.1 Finite Element Analysis Simulation	--	1.3.2 Computational Fluid Dynamics Simulation	--
	--	1.3.3 Discrete Event Simulation	--	1.3.4 Agent-Based Modeling Simulation	--	1.3.5 Multi-Body Dynamics Simulation	--	1.3.6 Monte Carlo Simulation	--
	--	1.4 Conclusion	--	References	--	Chapter 2 Comprehensive Analysis of Error Rate and Channel Capacity of Fisher Snedecor Composite Fading Model	--	2.1 Introduction	--
	--	2.2 Fisher Snedecor Composite Fading	--	2.3 Mathematical Analysis	--	2.3.1 Error Rate Analysis	--	2.3.1.1 NCBFSK and BDPSK	--
	--	2.3.1.2 BPSK, BFSK, and QPSK	--	2.3.1.3 MQAM	--	2.3.1.4 MPSK	--	2.3.1.5 MDPSK	--
	--	2.3.1.6 NCMFSK	--	2.3.1.7 DQPSK	--	2.3.2 Channel Capacity Analysis	--	2.3.2.1 ORA	--
	--	2.3.2.2 OPRA	--	2.3.2.3 CIFR	--	2.3.2.4 TIFR	--	2.4 Numerical Results	--
	--	2.5 Conclusion	--	References	--	Chapter 3 Implementation of Automatic Driving Car Test Approach Based on a Digital Twinning Technology and by Embedding Artificial Intelligence	--	3.1 Introduction	--
	--	3.2 Literature Review	--	3.3 Comparative Analysis	--	3.4 Result	--	3.5 Concluding Remarks and Future Scope	--
	--	References	--	Chapter 4 Intelligent Monitoring of Transformer Equipment in Terms of Earlier Fault Diagnosis Based on Digital Twins	--	4.1 Introduction	--	4.2 Methodology	--
	--	4.2.1 Arduino Uno	--	4.2.2 ESP32 Microcontroller	--	4.2.3 Data Acquisition	--	4.2.4 Blynk App	--
	--	4.3 Machine Learning-Based Predictive Maintenance	--	4.4 Results and Discussion	--	4.5 Conclusion and Future Work	--	References	--
	--	Chapter 5 Digital Twin System for Intelligent Construction of Large Span Assembly Type Steel Bridge	--	5.1 Introduction	--	5.1.1 Digital Twin Technology	--	5.1.2 Technologies Used	--
	--	5.1.3 Why Digital Twin?	--	5.1.4 Types of Digital Twins	--	5.2 Deep Learning	--	5.2.1 Types of Deep Neural Networks	--
	--	5.2.2 Learning or Training in Neural Networks	--	5.3 Simulation vs. Digital Twin Technology	--	5.3.1 Integrating Deep Learning in Simulation Models	--	5.3.2 Benefits of Deep Learning Digital Twin	--
	--	5.3.3 Applications of Digital Twin Technology	--	5.4 Literature Review	--	5.5 Conclusion	--	References	--
	--	Chapter 6 Digital Twin Application on System Identification and Control	--	6.1 Introduction	--	6.2 Digital Twin Technology and Its Application	--	6.2.1 Related Work on Digital Twin	--
	--	6.2.2 DT Application	--	6.2.3 Different Levels of DT Models	--	6.2.3.1 Pre-Digital Twin	--	6.2.3.2 Model Design	--
	--	6.2.3.3 Adaptive Model With DT Technology	--	6.2.3.4 The Process of Intelligent DT	--	6.2.4 Dynamic Model	--	6.2.5 Digital Twin and Machine Learning	--
	--	6.3 Control and Identification: A Survey	--	6.3.1 Hierarchy of System Identification Methods	--	6.3.1.1 Parametric Methods	--	6.3.1.2 Nonparametric Methods	--
	--	6.3.2 Machine Learning Approach	--	6.3.3 Deep Neural Network Approach	--	6.4 Proposed Methodology	--	6.4.1 DT Technology Application in Identification and Control	--
	--	6.5 Result Analysis and Discussion	--	6.5.1 Case Study: Control Application	--	6.6 Conclusion and Future Work	--	References	--
	--	Part 2: Real Time Applications of Digital Twin	--	Chapter 7 Digital Twinning-Based Autonomous Take-Off, Landing, and Cruising for Unmanned Aerial Vehicles	--	7.1 Introduction	--	7.1.1 Problem Statement	--
	--	7.1.2 Research Objectives	--	7.2 Digital Twinning for UAV Autonomy	--	7.3 Challenges and Limitations	--	7.3.1 Manual Control and Pre-Programmed Flight Paths	--
	--	7.3.2 Limited Adaptability to Dynamic Environments	--	7.3.3 Lack of	--		--		--

Real-Time Decision-Making -- 7.3.4 Limited Perception and Situational Awareness -- 7.3.5 Computational Complexity and Processing Power -- 7.3.6 Calibration and Validation -- 7.4 Proposed Framework -- 7.4.1 Digital Twin Creation -- 7.4.2 Sensor Fusion and Data Acquisition -- 7.4.3 Environmental Analysis -- 7.4.4 Decision-Making and Control -- 7.4.5 Communication and Synchronization -- 7.4.6 Validation and Calibration -- 7.4.7 Iterative Improvement -- 7.5 Benefits and Feasibility -- 7.5.1 Improved Adaptability -- 7.5.2 Real-Time Decision-Making -- 7.5.3 Enhanced Safety -- 7.5.4 Feasibility Considerations -- 7.6 Conclusion and Future Directions -- References -- Chapter 8 Execution of Fully Automated Coal Mining Face With Transparent Digital Twin Self-Adaptive Mining System -- 8.1 Introduction -- 8.2 Simulation Methods in Digital Twins -- 8.2.1 Computational Fluid Dynamics -- 8.2.1.1 Software Tools That are Being Used in Today's Domain for CFD -- 8.2.1.2 Real-World Applications of CFD -- 8.2.2 Multibody Dynamics -- 8.2.3 Kinematics for Multibody Systems -- 8.3 Literature Review -- 8.3.1 Classification of MBD Simulations -- 8.3.2 Finite Element Analysis -- 8.4 Proposed Work -- 8.5 Conclusion -- References -- Chapter 9 MGF-Based BER and Channel Capacity Analysis of Fisher Snedecor Composite Fading Model -- 9.1 Introduction -- 9.2 Fisher Snedecor Composite Fading Model -- 9.3 Performance Analysis Using MGF -- 9.3.1 ABER -- 9.3.1.1 BDPSK and NBFSK -- 9.3.1.2 BPSK and BFSK -- 9.3.1.3 MAM -- 9.3.1.4 Square MQAM -- 9.3.1.5 MPSK -- 9.3.2 NMFSK -- 9.3.3 Adaptive Channel Capacity -- 9.3.3.1 ORA -- 9.3.3.2 CIFR -- 9.4 Numerical Results -- 9.5 Conclusion -- References. Chapter 10 Precision Agriculture: An Augmented Datasets and CNN Model-Based Approach to Diagnose Diseases in Fruits and Vegetable Crops -- 10.1 Introduction -- 10.2 Literature Review -- 10.3 Major Fruit Diseases in the Valley -- 10.4 Methodology -- 10.5 Results and Discussion -- 10.6 Extended Experiment -- 10.7 Concluding Remarks -- References -- Chapter 11 A Simulation-Based Study of a Digital Twin Model of the Air Purifier System in Chandigarh Using LabVIEW -- 11.1 Introduction -- 11.1.1 Background Information on Chandigarh's Air Pollution Problem -- 11.1.2 Digital Twin Technology and Its Relevance to Air Quality Monitoring -- 11.2 Literature Review -- 11.3 Methodology -- 11.4 Results -- 11.5 Discussion -- 11.6 Conclusion -- References -- Chapter 12 Use of Digital Twin in Predicting the Life of Aircraft Main Bearing -- 12.1 Introduction -- 12.1.1 Background -- 12.1.2 Importance of Predictive Maintenance -- 12.1.3 Challenges in Aircraft Main Bearing Life Prediction -- 12.1.4 Digital Twin Technology in Aviation -- 12.2 Fundamentals of Digital Twin Technology -- 12.2.1 Components of a Digital Twin -- 12.2.2 Enabling Technologies for Digital Twin -- 12.3 Benefits of Digital Twin Technology -- 12.3.1 Aircraft Main Bearings: Structure and Failure Modes -- 12.4 Developing a Digital Twin for Aircraft Main Bearings -- 12.5 Predictive Analytics for Main Bearing Life Prediction -- 12.5.1 Machine Learning Algorithms for Predictive Modeling -- 12.5.2 Challenges of Digital Twin for Aircraft Health -- 12.5.3 Security Threats of the Digital Twin in Aircraft Virtualization -- 12.6 Future Prospects and Conclusion of Digital Twin for Aircraft Health -- References -- Chapter 13 Power Energy System Consumption Analysis in Urban Railway by Digital Twin Method -- 13.1 Introduction -- 13.2 Literature Review -- 13.3 Method -- 13.4 Implementation -- 13.5 Conclusion. References -- Chapter 14 Based on Digital Twin Technology, an Early Warning System and Strategy for Predicting Urban Waterlogging -- 14.1 Introduction -- 14.1.1 Definition -- 14.1.2 Application Areas of Digital Twin Technology -- 14.2 Literature Review -- 14.3 Methodology -- 14.4 Discussion and Conclusion -- References -- Chapter 15 Advanced

Real-Time Simulation Framework for the Physical Interaction Dynamics of Production Lines Leveraging Digital Twin Paradigms -- 15.1 Introduction -- 15.2 Introduction to Advanced Simulation Frameworks -- 15.2.1 The Evolution of Production Line Simulations -- 15.2.2 The Promise of Real-Time Analysis -- 15.3 Digital Twins: A Comprehensive Analysis -- 15.3.1 What Defines a Digital Twin? -- 15.3.2 The Architecture and Components of Digital Twins -- 15.3.3 Advantages of Integrating Digital Twins in Manufacturing -- 15.4 Physical Interaction Dynamics in Production Lines -- 15.4.1 The Nature of Physical Interactions -- 15.4.2 The Role of Dynamics in Production Efficiency -- 15.4.3 Challenges in Traditional Simulation Methods -- 15.5 Building the Advanced Real-Time Simulation Framework -- 15.5.1 Core Principles and Design Objectives -- 15.5.2 Data Integration and Processing -- 15.5.2.1 Role of Sensors and IoT -- 15.5.2.2 Algorithmic Foundations for Feedback -- 15.6 Types of Algorithms -- 15.6.1 Pseudocode for Real-Time Adjustments -- 15.6.1.1 Initialization -- 15.6.1.2 Data Collection and Pre-Processing -- 15.6.1.3 Analysis Using Bayesian Inference -- 15.6.1.4 Anomaly Detection and Root Cause Analysis -- 15.6.1.5 Corrective Action Using Gradient Boosting -- 15.6.1.6 Update and Implement -- 15.6.1.7 Continuous Monitoring -- 15.7 Practical Implementations and Case Studies -- 15.7.1 Implementing the Framework: A Step-by-Step Guide -- 15.7.2 Measurable Benefits and Outcomes -- 15.8 Overcoming Challenges and Limitations. 15.8.1 Potential Roadblocks in Framework Implementation.

---

## Sommario/riassunto

**SIMULATION TECHNIQUES OF DIGITAL TWIN IN REAL-TIME APPLICATIONS** The book gives a complete overview of implementing digital twin technology in real-time scenarios while emphasizing how this technology can be embedded with running technologies to solve all other issues. Divided into two parts with Part 1 focusing on simulated techniques in digital twin technology and Part 2 on real-time applications of digital twin technology, the book collects a significant number of important research articles from domain-specific experts. The book sheds light on the various techniques of digital twin technology that are implemented in various application areas. It emphasizes error findings and respective solutions before the actual event happens. Most of the features in the book are on the implementation of strategies in real-time applications. Various real-life experiences are taken to show the proper implementation of simulation technologies. The book shows how engineers of any technology can input their research ideas to convert to real scenarios by using replicas. Hence, the book has a collection of research articles from various engineers with expertise in different technologies from many regions of the world. It shows how to implement the embedded real-time data into technologies. Specifically, the chapters relate to the auto landing and cruising features in aerial vehicles, automated coal mining simulation strategy, the enhancement of workshop equipment, and implementation in power energy management for urban railways. This book also describes the coherent mechanism of digital twin technologies with deep neural networks and artificial intelligence. Audience Researchers, engineers, and students in computer science, software engineering and industrial engineering, will find this book to be very useful.

---