1. Record Nr. UNINA9910254320003321

Autore	Kerner Boris S
Titolo	Breakdown in Traffic Networks : Fundamentals of Transportation Science / / by Boris S. Kerner
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2017
ISBN	3-662-54473-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXIX, 652 p. 214 illus., 102 illus. in color.)
Disciplina	629.04
Soggetti	Transportation engineering Traffic engineering Sociophysics Econophysics Computational complexity Physics Transportation Technology and Traffic Engineering Data-driven Science, Modeling and Theory Building Complexity Applications of Graph Theory and Complex Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction. The Reason for Paradigm Shift in Transportation Science -- Achievements of Empirical Studies of Traffic Breakdown at Highway Bottlenecks -- Nucleation Nature of Traffic Breakdown – Empirical Fundamentalof Transportation Science -- Failure of Generally Accepted Classical Traffic Flow Theories -- Theoretical Fundamental of Transportation Science – The Three-Phase Theory -- Effect of Automatic Driving on Probability of Breakdown in Traffic Networks -- Future Automatic Driving based on Three-Phase Theory -- The Reason for Incommensurability of Three-Phase Theory with Classical Traffic Flow Theories -- Time-Delayed Breakdown at Traffic Signal in City Traffic -- Theoretical Fundamental of Transportation Science – Breakdown Minimization (BM) Principle -- Maximization of Network

Throughput Ensuring Free Flow Conditions in Network -- Minimization of Traffic Congestion in Networks -- Deterioration of Traffic System through Standard Dynamic Traffic Assignment in Networks -- Discussion of Future Dynamic Traffic Assignment and Control in Networks -- Conclusions and Outlook -- Kerner-Klenov Stochastic Microscopic Model in Framework of Three-Phase Theory -- Kerner-Klenov-Schreckenberg-Wolf (KKSW) Cellular Automaton (CA) Three-Phase Model -- Dynamic Traffic Assignment based on Wardrop's UE with Step-by-Step Method -- Glossary -- Index.

Sommario/riassunto

This book offers a detailed investigation of breakdowns in traffic and transportation networks. It shows empirically that transitions from free flow to so-called synchronized flow, initiated by local disturbances at network bottlenecks, display a nucleation-type behavior: while small disturbances in free flow decay, larger ones grow further and lead to breakdowns at the bottlenecks. Further, it discusses in detail the significance of this nucleation effect for traffic and transportation theories, and the consequences this has for future automatic driving, traffic control, dynamic traffic assignment, and optimization in traffic and transportation networks. Starting from a large volume of field traffic data collected from various sources obtained solely through measurements in real world traffic, the author develops his insights, with an emphasis less on reviewing existing methodologies, models and theories, and more on providing a detailed analysis of empirical traffic data and drawing consequences regarding the minimum requirements for any traffic and transportation theories to be valid. The book - proves the empirical nucleation nature of traffic breakdown in networks - discusses the origin of the failure of classical traffic and transportation theories - shows that the three-phase theory is incommensurable with the classical traffic theories, and - explains why current state-of-the art dynamic traffic assignments tend to provoke heavy traffic congestion, making it a valuable reference resource for a wide audience of scientists and postgraduate students interested in the fundamental understanding of empirical traffic phenomena and related data-driven phenomenology, as well as for practitioners working in the fields of traffic and transportation engineering.

2. Record Nr. UNINA9910865242003321

Autore	Marcus Aaron
Titolo	Design, User Experience, and Usability : 13th International Conference, DUXU 2024, Held as Part of the 26th HCI International Conference, HCII 2024, Washington, DC, USA, June 29 – July 4, 2024, Proceedings, Part IV / / edited by Aaron Marcus, Elizabeth Rosenzweig, Marcelo M. Soares
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031613593 9783031613586
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (0 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14715
Altri autori (Persone)	RosenzweigElizabeth SoaresMarcelo M
Disciplina	5,437 4,019
Soggetti	User interfaces (Computer systems) Human-computer interaction Application software Computer networks Software engineering User Interfaces and Human Computer Interaction Computer and Information Systems Applications Computer Communication Networks Software Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1: Designing Immersive Experiences across Contexts: Exploring Student Attention in the Metaverse: a Systematic Literature Review from the Perspective of Design and Ergonomics -- A Neuroeducational Approach in the Integration of Virtual Reality Technologies in the Development of Serious Games: Case Study in the Field of Occupational Safety and Risk Prevention -- Does Virtual Reality Allow Essay Participants Better Conditions to Get Information Regarding the Perception of Architectural Contexts? -- Panoramic 360 Image Versus 2D Video: What is the Best Inside Virtual Reality? -- Kinesics Language

Interaction in Virtual Reality -- Comparing the Therapeutic Effects of Using Traditional Methods and Virtual Reality Headset in the Treatment of Depression and Anxiety -- Analysis of the Impact on Immersive Experience: Narrative Effects in First and Third Person Perspectives -- IMARISS: Story Creation Tools - Inspiration Mobile Augmented Reality Interactive Story System -- Virtual Reality Image Creation in the Era of Artificial Intelligence. Part 2: Technology, Design, and Learner Engagement: Research on Strategies of Virtual Reality Technology to Promote Astronomy Science Popularization Education in Primary Schools -- Analysis of Gamification Strategies for Children's Safety Popularization Education Based on AR Technology -- The Impact of Innovative Education Driven by Design Thinking and Training Model of Innovative Talents on Student Engagement: The Moderating Role of Background of Blockchain Technology -- A Study on the Application of Digital Products Designed to Improve Primary School Students' Literacy Skills -- Bridging Cello Learning with Technological Innovations: An Exploration of Interaction Design Opportunities -- Unlocking Interactive Learning: Applying Bioecological Theory to Parent-child Interaction in Educational Product Design -- Research on an Educational Toy for Preschool Children's Oral Care Based on Persuasive Design -- Optimizing the Student Evaluation System in Higher Education: A Comprehensive Approach from the Perspective of Student Experience. Part 3: User Experience in Tangible and Intangible Cultural Heritage: Research on the Value Development and Spatial Experience of Rural Ecological Landscape in Lingnan -- Bibliometric Analysis on Intangible Cultural Heritage and Experience Marketing in China -- Visitor's Museum Experience Model in Mixed Reality Environment from the Perspective of 4E Cognition -- The Impact of Gamified AR Format on Engagement for Site Museum Tours -- User Experience Evaluation of an Immersive Virtual Reality Experience: The Case of the Palmela Dukes' Mausoleum in Lisbon's Prazeres Cemetery -- Research on the Application of Digital Technology in Museum-based Aesthetic Education of Children -- User Experience Research in China's Tourism Industry Based on Knowledge Map.

Sommario/riassunto

This five-volume set LNCS 14712-14716 constitutes the refereed proceedings of the 13th International Conference on Design, User Experience, and Usability, DUXU 2024, held as part of the 26th International Conference, HCI International 2024, in Washington, DC, USA, during June 29 – July 4, 2024. The total of 1271 papers and 309 posters included in the HCII 2024 proceedings was carefully reviewed and selected from 5108 submissions. The DUXU 2024 proceedings were organized in the following topical sections: Part I: Information Visualization and Interaction Design; Usability Testing and User Experience Evaluation. Part II: Designing Interactions for Intelligent Environments; Automotive Interactions and Smart Mobility Solutions; Speculative Design and Creativity. Part III: User Experience Design for Inclusion and Diversity; Human-Centered Design for Social Impact. Part IV: Designing Immersive Experiences across Contexts; Technology, Design, and Learner Engagement; User Experience in Tangible and Intangible Cultural Heritage. Part V: Innovative Design for Enhanced User Experience; Innovations in Product and Service Design.