Huawei Munich Research Center

Naveed Iqbal

The Digital Twin Noel Crespi,Adam T. Drobot,Roberto Minerva,2023-06-02 The Digital Twin book is about harnessing the power of technology, business practices, and the digital infrastructure to make revolutionary improvements for the benefit of society. Ninety experts from around the world contributed to summarize four decades of digital advances and successes, and to define the Digital Twin's potential for the decades ahead. The book describes how Digital Twins will play a key role in specific applications and across important sectors of the global economy, making it a must-read for executives, policymakers, technical leaders, researchers, and students alike. The book consists of thirty-eight chapters that cover Digital Twin concepts, supporting technologies, practices, and specific implementation strategies for various production and service sectors. Digital Twins are about creating faster, less expensive, and error-free manufacturing, products, processes, and services. This includes engineering of systems for energy, communications, construction, transportation, and food processing. It also covers solutions for making human existence better and more enjoyable through the life sciences, smart cities, and artistic creations. The Digital Twin's functionality addresses the entire lifecycle of products and services. Importantly, the book describes the journey required for businesses and public organizations to embrace Digital Twins as part of their tool kit. The Digital Twin is the ideal starting point for teaching and research in all application domains.

Cellular V2X for Connected Automated Driving Mikael Fallgren,Markus Dillinger,Toktam Mahmoodi,Tommy Svensson,2021-04-27 CELLULAR V2X FOR CONNECTED AUTOMATED DRIVING A unique examination of cellular communication technologies for connected automated driving, combining expert insights from telecom and automotive industries as well as technical and scientific knowledge from industry and academia Cellular vehicle-to-everything (C-V2X) technologies enable vehicles to communicate both with the network, with each other, and with other road users using reliable, responsive, secure, and high-capacity communication links. Cellular V2X for Connected Automated Driving provides an up-to-date view of the role of C-V2X technologies in connected automated driving (CAD) and connected road user (CRU) services, such as advanced driving support, improved road safety, infotainment, over-the-air software updates, remote driving, and traffic efficiency services enabling the future large-scale transition to self-driving vehicles. This timely book discusses where C-V2X technology is situated within the increasingly interconnected ecosystems of the mobile communications and automotive industries. An expert contributor team from both industry and academia explore potential

applications, business models, standardization, spectrum and channel modelling, network enhancements, security and privacy, and more. Broadly divided into two parts—introductory and advanced material—the text first introduces C-V2X technology and introduces a variety of use cases and opportunities, requiring no prerequisite technical knowledge. The second part of the book assumes a basic understanding of the field of telecommunications, presenting technical descriptions of the radio, system aspects, and network design for the previously discussed applications. This up-to-date resource: Provides technical details from the finding of the European Commission H2020 5G PPP 5GCAR project, a collaborative research initiative between the telecommunications and automotive industries and academic researchers Elaborates on use cases, business models, and a technology roadmap for those seeking to shape a start-up in the area of automated and autonomous driving Provides up to date descriptions of standard specifications, standardization and industry organizations and important regulatory aspects for connected vehicles Provides technical insights and solutions for the air interface, network architecture, positioning and security to support vehicles at different automation levels Includes detailed tables, plots, and equations to clarify concepts, accompanied by online tutorial slides for use in teaching and seminars Thanks to its mix of introductory content and technical information, Cellular V2X for Connected Automated Driving is a must-have for industry and academic researchers, telecom and automotive industry practitioners, leaders, policymakers, and regulators, and university-level instructors and students. Additional resources available at the following site: Cellular V2X for Connected Automated Driving – 5GCAR

Machine Learning and Knowledge Discovery in Databases. Applied Data Science Track Yuxiao Dong,Nicolas Kourtellis,Barbara Hammer,Jose A. Lozano,2021-09-09 The multi-volume set LNAI 12975 until 12979 constitutes the refereed proceedings of the European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD 2021, which was held during September 13-17, 2021. The conference was originally planned to take place in Bilbao, Spain, but changed to an online event due to the COVID-19 pandemic. The 210 full papers presented in these proceedings were carefully reviewed and selected from a total of 869 submissions. The volumes are organized in topical sections as follows: Research Track: Part I: Online learning; reinforcement learning; time series, streams, and sequence models; transfer and multi-task learning; semi-supervised and few-shot learning; learning algorithms and applications. Part II: Generative models; algorithms and learning theory; graphs and networks; interpretation, explainability, transparency, safety. Part III: Generative models; search and optimization; supervised learning; text mining and natural language processing; image processing, computer vision and visual analytics. Applied Data Science Track: Part IV: Anomaly detection and malware; spatio-temporal data; e-commerce and finance; healthcare and medical applications (including Covid); mobility and transportation. Part V: Automating machine learning, optimization, and feature engineering; machine learning based simulations and knowledge discovery; recommender systems and behavior modeling; natural language processing; remote sensing, image and video

processing; social media.

Mathematics for Future Computing and Communications Liao Heng,Bill McColl,2021-12-16 For 80 years, mathematics has driven fundamental innovation in computing and communications. This timely book provides a panorama of some recent ideas in mathematics and how they will drive continued innovation in computing, communications and AI in the coming years. It provides a unique insight into how the new techniques that are being developed can be used to provide theoretical foundations for technological progress, just as mathematics was used in earlier times by Turing, von Neumann, Shannon and others. Edited by leading researchers in the field, chapters cover the application of new mathematics in computer architecture, software verification, quantum computing, compressed sensing, networking, Bayesian inference, machine learning, reinforcement learning and many other areas.

Emerging Technologies for Authorization and Authentication Andrea Saracino,Paolo Mori,2022-01-13 This book constitutes the proceedings of the 4th International Workshop on Emerging Technologies for Authorization and Authentication, ETAA 2021, held in Darmstadt, Germany, on October 8, 2021. The workshop was co-located with ESORICS 2021. The 11 full papers presented in this volume were carefully reviewed and selected from 14 submissions. The workshop presents new techniques for biometric and behavioral based authentication, authentication and authorization in the IoT and in distributed systems in general, including smart home environment.

Tools and Algorithms for the Construction and Analysis of Systems Bernd Finkbeiner,Laura Kovács,2024-04-04 The open access book 3-volume set LNCS 14570-14573 constitutes the proceedings of the 30th International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2024, which was held as part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2024, during April 6-11, 2024, in Luxembourg. The 53 full papers and 16 short SVComp contributions included in these proceedings were carefully reviewed and selected from 159 submissions. They were organized in topical sections as follows:Part I: STA and SMT solving; synthesis; logic and decidability; program analysis and proofs; proof checking; Part II: Model Checking; automata and learning; software verification; probabilistic systems; simulations; Part III: Neural networks; testing and verification; games; concurrency; SV-Comp 2024.

Fundamentals of Service Systems Jorge Cardoso,Hansjörg Fromm,Stefan Nickel,Gerhard Satzger,Rudi Studer,Christof Weinhardt,2015-12-12 This textbook addresses the conceptual and practical aspects of the various phases of the lifecycle of service systems, ranging from service ideation, design, implementation, analysis, improvement and trading associated with service systems engineering. Written by leading experts in the field, this indispensable textbook will enable a new wave of future professionals to think in a service-focused way with the right balance of competencies in computer science, engineering, and management. Fundamentals of Service Systems is a centerpiece for a course syllabus on service systems.

Each chapter includes a summary, a list of learning objectives, an opening case, and a review section with questions, a project description, a list of key terms, and a list of further reading bibliography. All these elements enable students to learn at a faster and more comfortable peace. For researchers, teachers, and students who want to learn about this new emerging science, Fundamentals of Service Systems provides an overview of the core disciplines underlying the study of service systems. It is aimed at students of information systems, information technology, and business and economics. It also targets business and IT practitioners, especially those who are looking for better ways of innovating, designing, modeling, analyzing, and optimizing service systems.

Optical Modulation Le Nguyen Binh,2017-11-22 This books aims to present fundamental aspects of optical communication techniques and advanced modulation techniques and extensive applications of optical communications systems and networks employing single-mode optical fibers as the transmission system. New digital techqniues such as chromatic dispersion, polarization mode dispersion, nonlinear phase distortion effects, etc. will be discussed. Practical models for practice and understanding the behavior and dynamics of the devices and systems will be included.

Service-Oriented Computing – ICSOC 2020 Workshops Hakim Hacid,Fatma Outay,Hye-young Paik,Amira Alloum,Marinella Petrocchi,Mohamed Reda Bouadjenek,Amin Beheshti,Xumin Liu,Abderrahmane Maaradji,2021-05-29 This book constitutes revised and selected papers from the scientific satellite events held in conjunction with the18th International Conference on Service-Oriented Computing, ICSOC 2020. The conference was held virtually during December 14-17, 2020. A total of 125 submissions were received for the satellite events. The volume includes 9 papers from the PhD Symposium Track, 4 papers from the Demonstration Track, and 45 papers from the following workshops: International Workshop on Artificial Intelligence for IT Operations (AIOps) International Workshop on Cyber Forensics and Threat Investigations Challenges in Emerging Infrastructures (CFTIC 2020) 2nd Workshop on Smart Data Integration and Processing (STRAPS 2020) International Workshop on AI-enabled Process Automation (AI-PA 2020) International Workshop on Artificial Intelligence in the IoT Security Services (AI-IOTS 2020)

Optical Multi-Bound Solitons Le Nguyen Binh,2018-09-03 Optical Multi-Bound Solitons describes the generation and transmission of multi-bound solitons with the potential to form the basis of the temporal coding of optical data packets for next-generation nonlinear optical systems. The book deals with nonlinear systems in terms of their fundamental principles, associated phenomena, and signal processing applications in contemporary optical systems for communications and laser systems, with a touch of mathematical representation of nonlinear equations to offer insight into the nonlinear dynamics at different phases. The text not only delineates the strong background physics of such systems but also: Discusses the phase evolution of the optical carriers under the soliton envelopes for the generation of multi-bound solitons Explains the generation of multi-bound solitons through optical fibers Examines new types of multi-bound solitons in passive and active

optical resonators Conducts bi-spectral analyses of multi-bound solitons to identify the phase and power amplitude distribution property of bound solitons Presents experimental techniques for the effective generation of bound solitons Optical Multi-Bound Solitons provides extensive coverage of multi-bound solitons from the dynamics of their formation to their transmission over guided optical media. Appendices are included to supplement a number of essential definitions, mathematical representations, and derivations, making this book an ideal theoretical reference text as well as a practical professional guidebook.

Space Photonic Communications Le Nguyen Binh,2025-01-29 This book explores the extension of fiber optic communications technology to space optical communications. It presents the specific demands for space communications and examines propagation in a vacuum and also over the turbulence of air-free space. Space Photonic Communications begins with historical aspects of optical communications in both terrestrial and inter-satellite constellations. It presents the advances in optical communications and integrated photonics that have enabled the technological developments for space photonic communications, especially coherent optical communications to transport Tbps information. The author discusses how the transmission of massive amounts of data over very long distances requires Tera-bps communications in real time for both military and civil applications. The author also explores laser communications with the physics of laser propagation over ultra-long distances without optical amplifications at intermediate locations. He also examines modulation and receiving techniques for space photonic communications. Intended for communications engineers and professionals, especially those in laser communication technologies, this book could also be used in courses on advanced optical communications, photonic communications, and communication techniques and technologies.

Optics for AI and AI for Optics Jinlong Wei,Alan Pak Tao Lau,Lilin Yi,Elias Giacoumidis,Qixiang Cheng,2020-06-23 Artificial intelligence is deeply involved in our daily lives via reinforcing the digital transformation of modern economies and infrastructure. It relies on powerful computing clusters, which face bottlenecks of power consumption for both data transmission and intensive computing. Meanwhile, optics (especially optical communications, which underpin today’s telecommunications) is penetrating short-reach connections down to the chip level, thus meeting with AI technology and creating numerous opportunities. This book is about the marriage of optics and AI and how each part can benefit from the other. Optics facilitates on-chip neural networks based on fast optical computing and energy-efficient interconnects and communications. On the other hand, AI enables efficient tools to address the challenges of today’s optical communication networks, which behave in an increasingly complex manner. The book collects contributions from pioneering researchers from both academy and industry to discuss the challenges and solutions in each of the respective fields.

Computer Vision – ECCV 2022 Shai Avidan,Gabriel Brostow,Moustapha Cissé,Giovanni Maria Farinella,Tal Hassner,2022-11-08 The 39-volume set, comprising the LNCS books 13661 until 13699, constitutes the refereed proceedings

of the 17th European Conference on Computer Vision, ECCV 2022, held in Tel Aviv, Israel, during October 23–27, 2022. The 1645 papers presented in these proceedings were carefully reviewed and selected from a total of 5804 submissions. The papers deal with topics such as computer vision; machine learning; deep neural networks; reinforcement learning; object recognition; image classification; image processing; object detection; semantic segmentation; human pose estimation; 3d reconstruction; stereo vision; computational photography; neural networks; image coding; image reconstruction; object recognition; motion estimation.

Embedded Computer Systems: Architectures, Modeling, and Simulation Alex Orailoglu,Matthias Jung,Marc Reichenbach,2022-04-26 This book constitutes the proceedings of the 21st International Conference on Embedded Computer Systems: Architectures, Modeling, and Simulation, SAMOS 2021, which took place in July 2021. Due to COVID-19 pandemic the conference was held virtually. The 17 full papers presented in this volume were carefully reviewed and selected from 45 submissions. The papers are organized in topics as follows: simulation and design space exploration; the 3Cs - Cache, Cluster and Cloud; heterogeneous SoC; novel CPU architectures and applications; dataflow; innovative architectures and tools for security; next generation computing; insights from negative results.

Machine Learning and Principles and Practice of Knowledge Discovery in Databases Michael Kamp,Irena Koprinska,Adrien Bibal,Tassadit Bouadi,Benoît Frénay,Luis Galárraga,José Oramas,Linara Adilova,Yamuna Krishnamurthy,Bo Kang,Christine Largeron,Jefrey Lijffijt,Tiphaine Viard,Pascal Welke,Massimiliano Ruocco,Erlend Aune,Claudio Gallicchio,Gregor Schiele,Franz Pernkopf,Michaela Blott,Holger Fröning,Günther Schindler,Riccardo Guidotti,Anna Monreale,Salvatore Rinzivillo,Przemyslaw Biecek,Eirini Ntoutsi,Mykola Pechenizkiy,Bodo Rosenhahn,Christopher Buckley,Daniela Cialfi,Pablo Lanillos,Maxwell Ramstead,Tim Verbelen,Pedro M. Ferreira,Giuseppina Andresini,Donato Malerba,Ibéria Medeiros,Philippe Fournier-Viger,M. Saqib Nawaz,Sebastian Ventura,Meng Sun,Min Zhou,Valerio Bitetta,Ilaria Bordino,Andrea Ferretti,Francesco Gullo,Giovanni Ponti,Lorenzo Severini,Rita Ribeiro,João Gama,Ricard Gavaldà,Lee Cooper,Naghmeh Ghazaleh,Jonas Richiardi,Damian Roqueiro,Diego Saldana Miranda,Konstantinos Sechidis,Guilherme Graça,2022-02-17 This two-volume set constitutes the refereed proceedings of the workshops which complemented the 21th Joint European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD, held in September 2021. Due to the COVID-19 pandemic the conference and workshops were held online. The 104 papers were thoroughly reviewed and selected from 180 papers submited for the workshops. This two-volume set includes the proceedings of the following workshops:Workshop on Advances in Interpretable Machine Learning and Artificial Intelligence (AIMLAI 2021)Workshop on Parallel, Distributed and Federated Learning (PDFL 2021)Workshop on Graph Embedding and Mining (GEM 2021)Workshop on Machine Learning for Irregular Time-series (ML4ITS 2021)Workshop on IoT, Edge, and Mobile for Embedded Machine Learning (ITEM 2021)Workshop on eXplainable Knowledge Discovery in Data

Mining (XKDD 2021)Workshop on Bias and Fairness in AI (BIAS 2021)Workshop on Workshop on Active Inference (IWAI 2021)Workshop on Machine Learning for Cybersecurity (MLCS 2021)Workshop on Machine Learning in Software Engineering (MLiSE 2021)Workshop on MIning Data for financial applications (MIDAS 2021)Sixth Workshop on Data Science for Social Good (SoGood 2021)Workshop on Machine Learning for Pharma and Healthcare Applications (PharML 2021)Second Workshop on Evaluation and Experimental Design in Data Mining and Machine Learning (EDML 2020)Workshop on Machine Learning for Buildings Energy Management (MLBEM 2021)

Applications of Big Data Analytics Mohammed M. Alani,Hissam Tawfik,Mohammed Saeed,Obinna Anya,2018-07-23 This timely text/reference reviews the state of the art of big data analytics, with a particular focus on practical applications. An authoritative selection of leading international researchers present detailed analyses of existing trends for storing and analyzing big data, together with valuable insights into the challenges inherent in current approaches and systems. This is further supported by real-world examples drawn from a broad range of application areas, including healthcare, education, and disaster management. The text also covers, typically from an application-oriented perspective, advances in data science in such areas as big data collection, searching, analysis, and knowledge discovery. Topics and features: Discusses a model for data traffic aggregation in 5G cellular networks, and a novel scheme for resource allocation in 5G networks with network slicing Explores methods that use big data in the assessment of flood risks, and apply neural networks techniques to monitor the safety of nuclear power plants Describes a system which leverages big data analytics and the Internet of Things in the application of drones to aid victims in disaster scenarios Proposes a novel deep learning-based health data analytics application for sleep apnea detection, and a novel pathway for diagnostic models of headache disorders Reviews techniques for educational data mining and learning analytics, and introduces a scalable MapReduce graph partitioning approach for high degree vertices Presents a multivariate and dynamic data representation model for the visualization of healthcare data, and big data analytics methods for software reliability assessment This practically-focused volume is an invaluable resource for all researchers, academics, data scientists and business professionals involved in the planning, designing, and implementation of big data analytics projects. Dr. Mohammed M. Alani is an Associate Professor in Computer Engineering and currently is the Provost at Al Khawarizmi International College, Abu Dhabi, UAE. Dr. Hissam Tawfik is a Professor of Computer Science in the School of Computing, Creative Technologies & Engineering at Leeds Beckett University, UK. Dr. Mohammed Saeed is a Professor in Computing and currently is the Vice President for Academic Affairs and Research at the University of Modern Sciences, Dubai, UAE. Dr. Obinna Anya is a Research Staff Member at IBM Research – Almaden, San Jose, CA, USA.

Quality of Experience Sebastian Möller,Alexander Raake,2014-07-08 This pioneering book develops definitions and concepts related to Quality of Experience in the context of multimedia- and telecommunications-related applications, systems

and services and applies these to various fields of communication and media technologies. The editors bring together numerous key-protagonists of the new discipline “Quality of Experience” and combine the state-of-the-art knowledge in one single volume.

Health 4.0: How Virtualization and Big Data are Revolutionizing Healthcare Christoph Thuemmler,Chunxue Bai,2017-01-07 This book describes how the creation of new digital services—through vertical and horizontal integration of data coming from sensors on top of existing legacy systems—that has already had a major impact on industry is now extending to healthcare. The book describes the fourth industrial revolution (i.e. Health 4.0), which is based on virtualization and service aggregation. It shows how sensors, embedded systems, and cyber-physical systems are fundamentally changing the way industrial processes work, their business models, and how we consume, while also affecting the health and care domains. Chapters describe the technology behind the shift of point of care to point of need and away from hospitals and institutions; how care will be delivered virtually outside hospitals; that services will be tailored to individuals rather than being designed as statistical averages; that data analytics will be used to help patients to manage their chronic conditions with help of smart devices; and that pharmaceuticals will be interactive to help prevent adverse reactions. The topics presented will have an impact on a variety of healthcare stakeholders in a continuously global and hyper-connected world. · Presents explanations of emerging topics as they relate to e-health, such as Industry 4.0, Precision Medicine, Mobile Health, 5G, Big Data, and Cyber-physical systems; · Provides overviews of technologies in addition to possible application scenarios and market conditions; · Features comprehensive demographic and statistic coverage of Health 4.0 presented in a graphical manner.

Millimeter Wave Radio Channels Naveed Iqbal,2023 In dieser Arbeit werden drei grundlegende Probleme der Modellierung von Drahtloskanälen für die Anwendung bei der Funkkanalmodellierung im Millimeterwellenbereich (mmWave) untersucht, nämlich (i) die Frequenzabhängigkeit der Ausbreitung, (ii) der Einfluss der Antennenrichtwirkung auf die Definition des Kanalmodells und (iii) der Einfluss der Systembandbreite auf die Funkkanalmodellierung. Die detaillierte Beschreibung dieser Probleme lautet wie folgt: (i) Frequenzabhängigkeit der Ausbreitung. Mehrband-Messkampagnen werden mit Richtantennen durchgeführt, die eine omnidirektionale Abtastung der Ausbreitungsumgebung vornehmen. Während der Messungen werden die Tx-Rx-Systeme an festen Positionen platziert und die Ausbreitungsumgebung bleibt so statisch wie möglich. Mit Hilfe von synthetisierten omnidirektionalen Verzögerungs-Leistungsprofilen soll untersucht werden, ob es eine Frequenzabhängigkeit in der Mehrwegeausbreitungsstatistik gibt, z.B. in der Verzögerung und der Winkelspreizung. (ii) Einfluss der Antennenrichtwirkung auf die Definition des Kanalmodells. Es werden Messungen des schnellen Schwunds durchgeführt, die ein Szenario emulieren, bei dem eine Funkverbindung über ein einzelnes Mehrwege-Cluster aufgebaut wird, das mit Antennen mit unterschiedlichen Strahlbreiten ausgeleuchtet wird. Das Hauptziel ist hier die

Untersuchung des Einflusses der räumlichen Filterung auf den schnellen Schwund aufgrund der hohen Antennenrichtwirkung. Insbesondere wird die Auswirkung auf Variationen der Empfangssignalstärke und die Gültigkeit der Annahme der schmalbandigen Stationarität im weiteren Sinne (sowohl im Zeit- als auch im Frequenzbereich) untersucht. (iii) Einfluss der Systembandbreite auf die Funkkanalmodellierung. Messungen des schnellen Schwunds werden verwendet, um Mehrwege-Cluster in einem Hörsaal-Szenario auszuleuchten. Das primäre Ziel ist es, den Einfluss einer hohen Systembandbreite auf die Variationen der Empfangssignalstärke, die Zufälligkeit des Kreuzpolarisationsverhältnisses und die Reichhaltigkeit der Mehrwegstreuung zu untersuchen. Basierend auf der Charakterisierung realistischer Funkkanäle führen die in dieser Dissertation vorgestellten Ergebnisse zu dem Verständnis, dass beim Übergang zu höheren Frequenzen die Frequenz x selbst keine signifikante Rolle bei der Definition der Kanalmodellierungsmethodik spielt. Vielmehr ist es von grundlegender Bedeutung, wie ein Ausbreitungskanal ausgeleuchtet wird. Daher zeigt sich, dass mmWave-Systemeigenschaften wie eine hohe Antennenrichtcharakteristik und Systembandbreite einen hohen Einfluss auf die Definition des Kanalmodells haben. Im Allgemeinen ist die Skalierung der Schwundtiefe als Funktion der Systembandbreite ziemlich gut verstanden. Wir zeigen, dass die hohe Antennenrichtwirkung von mmWave-Systemen zu einer weiteren Reduzierung der Schwundtiefe führt. Zusätzlich erforschen wir einige neue Richtungen in diesem Forschungsbereich, die auf der Analyse der Statistik zweiter Ordnung des Kanalimpulsantwort-Vektors basieren. Unsere Ergebnisse unterstreichen, dass die Schwund-Statistiken der auflösbaren Kanalabgriffe in einem mmWave-Funkkanal nicht als Rayleigh-Rice-verteilte Zufallsvariablen modelliert werden können. Dies liegt vor allem daran, dass durch die hohe Antennenrichtwirkung und Bandbreite von mmWave-Systemen Kanäle mit spärlichen Streubedingungen ausgeleuchtet werden. Folglich ist die Annahme komplexer Gaus'scher Zufallsvariablen, die mit Rayleigh-Rice Schwundverteilungen verbunden ist, nicht mehr gültig. Des Weiteren wird gezeigt, dass die hohe Antennenrichtwirkung und Bandbreite von mmWave-Systemen auch die Gültigkeit der Annahme von Stationarität im weiteren Sinne im Slow-Time-Bereich von mmWave-Funkkanälen in Frage stellt. Die in diesem Beitrag vorgestellten Ergebnisse sind neuartig und bieten theoretisch konsistente Einblicke in den gemessenen Funkkanal.

Cloud Infrastructures, Services, and IoT Systems for Smart Cities Antonella Longo,Marco Zappatore,Massimo Villari,Omer Rana,Dario Bruneo,Rajiv Ranjan,Maria Fazio,Philippe Massonet,2017-10-25 This book constitutes the proceedings of the Second International Conference on Cloud, Networking for IoT Systems, CN4IoT 2017, and the Second EAI International Conference on ICT Infrastructures and Services for Smart Cities, IISSC 2017, held in Brindisi, Italy, in April 2017. The 26 full papers of both conferences were selected from 39 submissions. CN4IoT presents research activities on the uniform management and operation related to software defined infrastructures, in particular by analyzing limits or advantages in solutions for Cloud Networking and IoT. IISSC papers focus on ICT infrastructures (technologies, models, frameworks) and services in cities and smart communities.

Huawei Munich Research Center Book Review: Unveiling the Magic of Language

In a digital era where connections and knowledge reign supreme, the enchanting power of language has be much more apparent than ever. Its capability to stir emotions, provoke thought, and instigate transformation is truly remarkable. This extraordinary book, aptly titled "**Huawei Munich Research Center**," compiled by a highly acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound impact on our existence. Throughout this critique, we shall delve in to the book is central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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