You Only Look Once Uni Ed Real Time Object Detection

This book constitutes selected and revised papers presented at the First International Conference on Optimization, Learning Algorithms and Applications, OL2A 2021, held in Bragança, Portugal, in July 2021. Due to the COVID-19 pandemic the conference was held online. The 39 full papers and 13 short papers were thoroughly reviewed and selected from 134 submissions. They are organized in the topical sections on optimization theory; robotics; measurements with the internet of things; optimization in control systems design; deep learning; data visualization and virtual reality; health informatics; data analysis; trends in engineering education.

Frontiers in Animal Science – Highlights From Its First YearFrontiers Media SAICTR 2021 4th International Conference on Tourism ResearchAcademic Conferences International

This book presents chapters from diverse range of authors on different aspects of how Blockchain and IoT are converging and the impacts of these developments. The book provides an extensive cross-sectional and multi-disciplinary look into this trend and how it affects artificial intelligence, cyber-physical systems, and robotics with a look at applications in aerospace, agriculture, automotive, critical infrastructures, healthcare, manufacturing, retail, smart transport systems, smart cities, and smart healthcare. Cases include the impact of Blockchain for IoT Security; decentralized access control systems in IoT; Blockchain architecture for scalable access management in IoT; smart and sustainable IoT applications incorporating Blockchain, and more. The book presents contributions from international academics, researchers, and practitioners from diverse perspectives. Presents how Blockchain and IoT are converging and the impacts of these developments on technology and its application; Discusses IoT and Blockchain from cross-sectional and multi-disciplinary perspectives; Includes contributions from researchers, academics, and professionals from around the world.

This book presents the refereed proceedings of the 6th International Conference on Advanced Machine Learning Technologies and Applications (AMLTA 2021) held in Cairo, Egypt, during March 22–24, 2021, and organized by the Scientific Research Group of Egypt (SRGE). The papers cover current research Artificial Intelligence Against COVID-19, Internet of Things Healthcare Systems, Deep Learning Technology, Sentiment analysis, Cyber-Physical System, Health Informatics, Data Mining, Power and Control Systems, Business Intelligence, Social media, Control Design, and Smart Systems.

Proceedings of the 2021 Computing Conference

Advanced Multimedia and Ubiquitous Engineering

Working Machines

First International Conference, ANTIC 2021, Varanasi, India, December 17–18, 2021, Proceedings

Proceedings of the 4th International Conference on Modelling, Computation and Optimization in Information Systems and

Management Sciences - MCO 2021

Rail Transportation Information Processing and Operational Management Technologies

Proceedings of International Symposium, ISCMM 2021

This book gathers outstanding research papers presented at the International Conference on Intelligent Vision and Computing (ICIVC 2021), held online during October 03–04, 2021. ICIVC 2021 is organised by Sur University, Oman. The book presents novel contributions in intelligent vision and computing and serves as reference material for beginners and advanced research. The topics covered are intelligent systems, intelligent data analytics and computing, intelligent vision and applications collective intelligence, soft computing, optimization, cloud computing, machine learning, intelligent software, robotics, data science, data security, big data analytics, and signal natural language processing.

Artificial intelligence has become an indispensible part of our lives in recent years, affecting all aspects from business and leisure to transport and health care. This book presents the proceedings of the 23rd edition of the International Conference of the Catalan Association for Artificial Intelligence (CCIA), an annual event that serves as a meeting point for researchers in Artificial Intelligence in the area of the Catalan speaking territories and from around the world. The 2021 edition was held online as a virtual conference from 20 - 22 October 2021 due to the COVID-19 pandemic. The book contains 42 long papers and 9 short papers, carefully reviewed and selected. The papers cover all aspects of artificial intelligence and are divided under six section headings: combinatorial problem solving and logics for artificial intelligence; sentiment analysis and tekst analysis; data science and decision support systems; machine learning; computer vision; and explainability and argumentation. Abstracts of the 2 invited talks delivered at the conference by Prof. Patty Kostkova and Prof. João Marques-Silva are also included. Offering a state of the art overview of the subject from a regional perspective, the book will be of interest to all those working in the field of artificial intelligence.

This book includes the post-conference proceedings of the 23rd RoboCup International Symposium, held in Sydney, NSW, Australia, in July 2019. The 38 full revised papers and 14 invited papers presented in this book were carefully reviewed and selected from 74 submissions. This book highlights the approaches of champion teams from the competitions and documents the proceedings of the 23rd annual RoboCup International Symposium. Due to the complex research challenges set by the RoboCup initiative, the RoboCup International Symposium offers a unique perspective for exploring scientific and engineering principles underlying advanced robotic and AI systems.

Step-by-step tutorials on deep learning neural networks for computer vision in python with Keras.

8th International Conference, FDSE 2021, Virtual Event, November 24–26, 2021, Proceedings

Proceedings of the International Conference on Intelligent Vision and Computing (ICIVC 2021)

Second CCF Chinese Conference, CCCV 2017, Tianjin, China, October 11–14, 2017, Proceedings, Part III

Proceedings of ICACII 2019

Proceedings of the 8th International Conference on Communications, Signal Processing, and Systems

Modelling, Computation and Optimization in Information Systems and Management Sciences

This book examines innovation in the fields of computer engineering and networking, and explores important, state-of-the-art developments in areas such as artificial intelligence, machine learning, information analysis and communication. It gathers papers presented at the 8th International Conference on Computer Engineering and Networks (CENet2018), held in Shanghai, China on August 17–19, 2018. • Explores emerging topics in computer engineering and networking, along with their applications • Discusses how to improve productivity by using the latest advanced technologies • Examines innovation in the fields of computer engineering and networking

This book comprises select proceedings of the International Conference on Advances in Electrical and Computer Technologies 2021 (ICAECT 2021). The papers presented in this book are peer-reviewed and cover the latest research in electrical, electronics, communication, and computer engineering. Topics covered include smart grids, soft computing techniques in power systems, smart energy management systems, power electronics, feedback control systems, biomedical engineering, geographic information systems, grid computing, data mining, image and signal processing, video processing, computer vision, pattern recognition, cloud computing, pervasive computing, intelligent systems, artificial intelligence, neural network and fuzzy logic, broadband communication, mobile and optical communication, network security, VLSI, embedded systems, optical networks, and wireless communication. The book is useful for students and researchers working in the different overlapping areas of electrical, electronics, and communication engineering.

This two-volume set of LNCS 12509 and 12510 constitutes the refereed proceedings of the 15th International Symposium on Visual Computing, ISVC 2020, which was supposed to be held in San Diego, CA, USA in October 2020, took place virtually instead due to the COVID-19 pandemic. The 118 papers presented in these volumes were carefully reviewed and selected from 175 submissions. The papers are organized into the following topical sections: Part I: deep learning; segmentation; visualization; video analysis and event recognition; ST: computational bioimaging; applications; biometrics; motion and tracking; computer graphics; virtual reality; and ST: computer vision advances in geo-spatial applications and remote sensing Part II: object recognition/detection/categorization; 3D reconstruction; medical image analysis; vision for robotics; statistical pattern recognition; posters

his two-volume set LNCS 12689-12690 constitutes the refereed proceedings of the 12th International Conference on Advances in Swarm Intelligence, ICSI 2021, held in Qingdao, China, in July 2021. The 104 full papers presented in this volume were carefully reviewed and selected from 177 submissions. They cover topics such as: Swarm Intelligence and Nature-Inspired Computing; Swarm-based Computing Algorithms for Optimization; Particle Swarm Optimization; Ant Colony Optimization; Differential Evolution; Genetic Algorithm and Evolutionary Computation; Fireworks Algorithms; Brain Storm Optimization Algorithm; Bacterial Foraging Optimization Algorithm; DNA

Computing Methods; Multi-Objective Optimization; Swarm Robotics and Multi-Agent System; UAV Cooperation and Control; Machine Learning; Data Mining; and Other Applications.

21st International Conference on Hybrid Intelligent Systems (HIS 2021), December 14–16, 2021

Advances in Visual Computing

Advancements in Computer Vision Applications in Intelligent Systems and Multimedia Technologies

Proceedings of the 2nd International Conference on Artificial Intelligence in China

APPLEPIES 2020

Deep Learning for Computer Vision

Proceedings of the 11th International Conference on Computer Engineering and Networks

Two significant areas of study that are continually impacting various dimensions in computer science are computer vision and imaging. These technologies are rapidly enhancing how information and data is being exchanged and opening numerous avenues of advancement within areas such as multimedia and intelligent systems. The high level of applicability in computer vision and image processing requires significant research on the specific utilizations of these technologies. Advancements in Computer Vision Applications in Intelligent Systems and Multimedia Technologies is an essential reference source that discusses innovative developments in computational imaging for solving real-life issues and problems and addresses their execution in various disciplines. Featuring research on topics such as image modeling, remote sensing, and support vector machines, this book is ideally designed for IT specialists, scientists, researchers, engineers, developers, practitioners, industry professionals, academicians, and students seeking coverage on the latest developments and innovations in computer vision applications within the realm of multimedia systems.

This book features high-quality research papers presented at the 3rd International Conference on Computational Intelligence in Pattern Recognition (CIPR 2021), held at the Institute of Engineering and Management, Kolkata, West Bengal, India, on 24 – 25 April 2021. It includes practical development experiences in various areas of data analysis and pattern recognition, focusing on soft computing technologies, clustering and classification algorithms, rough set and fuzzy set theory, evolutionary computations,

neural science and neural network systems, image processing, combinatorial pattern matching, social network analysis, audio and video data analysis, data mining in dynamic environments, bioinformatics, hybrid computing, big data analytics and deep learning. It also provides innovative solutions to the challenges in these areas and discusses recent developments.

This book constitutes the proceedings of the 8th International Conference on Future Data and Security Engineering, FDSE 2021, held in Ho Chi Minh City, Vietnam, in November 2021.* The 28 full papers and 8 short were carefully reviewed and selected from 168 submissions. The selected papers are organized into the following topical headings: big data analytics and distributed systems; security and privacy engineering; industry 4.0 and smart city: data analytics and security; blockchain and access control; data analytics and healthcare systems; and short papers: security and data engineering. * The conference was held virtually due to the COVID-19 pandemic.

This book presents the combined proceedings of the 13th International Conference on Multimedia and Ubiquitous Engineering (MUE 2019) and the 14th International Conference on Future Information Technology (Future Tech 2019), both held in Xi'an, China, April 24 - 26, 2019. The aim of these two meetings was to promote discussion and interaction among academics, researchers and professionals in the field of ubiquitous computing technologies. These proceedings reflect the state of the art in the development of computational methods, involving theory, algorithms, numerical simulation, error and uncertainty analysis and novel applications of new processing techniques in engineering, science, and other disciplines related to ubiquitous computing.

Hands-On Computer Vision with TensorFlow 2
Hybrid Intelligent Systems
Proceedings of CIPR 2021
Advanced Network Technologies and Intelligent Computing
39th National Conference of Theoretical Computer Science, NCTCS 2021, Yinchuan, China, July 23–25, 2021, Revised Selected Papers
Artificial Intelligence Research and Development

First International Conference, OL2A 2021, Bragança, Portugal, July 19–21, 2021, Revised Selected Papers

This three volume set, CCIS 771, 772, 773, constitutes the refereed proceedings of the CCF Chinese Conference on Computer Vision, CCCV 2017, held in Tianjin, China, in October 2017. The total of 174 revised full papers presented in three volumes were carefully reviewed and selected from 465 submissions. The papers are organized in the following topical sections: biological vision inspired visual method; biomedical image analysis; computer vision applications; deep neural network; face and posture analysis; image and video retrieval; image color and texture; image composition; image quality assessment and analysis; image restoration; image segmentation and classification; image-based modeling; object detection and classification; object identification; photography and video; robot vision; shape representation and matching; statistical methods and learning; video analysis and event recognition; visual salient detection.

This book presents selected papers from the 17th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, in conjunction with the 14th International Conference on Frontiers of Information Technology, Applications and Tools, held on 29-31 October 2021 in Kaohsiung, Taiwan. It is divided into two volumes and discusses latest research outcomes in the field of information technology (IT) including but not limited to information hiding, multimedia signal processing, big data, data mining, bioinformatics, database, industrial and internet of things, and their applications.

Functional Pavements is a collection of papers presented at the 6th Chinese-European Workshop (CEW) on Functional Pavement Design (Nanjing, China, October 18-21, 2020). The focus of the CEW series is on field tests, laboratory test methods and advanced analysis techniques, and cover analysis, material development and production, experimental characterization, design and construction of pavements. The main areas covered by the book include: • Asphalt binders for flexible pavements • Asphalt mixture evaluation and performance • Pavement construction and maintenance • Pavement Surface Properties and Vehicle Interaction • Cementitious materials for rigid pavements • Pavement geotechnics and environment Functional Pavements aims at contributing to the establishment of a new generation of pavement design methodologies in which rational mechanics principles, advanced constitutive models and advanced material characterization techniques shall constitute the backbone of the design process. The book will be much of interest to professionals, academics and practitioners in pavement engineering

and related disciplines as it should assist them in providing improved road pavement infrastructure to their stakeholders.

This book is a collection of outstanding papers presented at the 1st International Conference on Advances in Computational Intelligence and Informatics (ICACII 2019), organized by the Department of Computer Science & Engineering, Anurag Group of Institutions (AGI), Hyderabad, on 20–21 December 2019. It includes innovative ideas and new research findings in the field of Computational Intelligence and Informatics that will benefit researchers, scientists, technocrats, academics and engineers alike. The areas covered include high-performance systems, data science and analytics, computational intelligence and expert systems, cloud computing, computer networks and emerging technologies.

Communications, Signal Processing, and Systems

Handbook of Research on Developing Smart Cities Based on Digital Twins

The 8th International Conference on Computer Engineering and Networks (CENet2018)

Innovation Through Information Systems

Advanced Applied Deep Learning

Intelligent Computing

Optimization, Learning Algorithms and Applications

This book focuses on soft computing and how it can be applied to solve real-world problems arising in various dom from medicine and healthcare, to supply chain management, image processing and cryptanalysis. It gathers high-qu presented at the International Conference on Soft Computing: Theories and Applications (SoCTA 2020), organized o book is divided into two volumes and offers valuable insights into soft computing for teachers and researchers alik inspire further research in this dynamic field.

This conference proceeding is a collection of the papers accepted by the CENet2021 – the 11th International Confe Computer Engineering and Networks held on October 21-25, 2021 in Hechi, China. The topics focus but are not lim Internet of Things and Smart Systems, Artificial Intelligence and Applications, Communication System Detection, Ana Application, and Medical Engineering and Information Systems. Each part can be used as an excellent reference by practitioners, university faculties, research fellows and undergraduates as well as graduate students who need to knowledge base of the most current advances and state-of-practice in the topics covered by this conference proc enable them to produce, maintain, and manage systems with high levels of trustworthiness and complexity.

The book Intelligent Systems and Applications - Proceedings of the 2020 Intelligent Systems Conference is a remar

collection of chapters covering a wider range of topics in areas of intelligent systems and artificial intelligence and applications to the real world. The Conference attracted a total of 545 submissions from many academic pioneering scientists, industrial engineers, students from all around the world. These submissions underwent a double-blind pe process. Of those 545 submissions, 177 submissions have been selected to be included in these proceedings. As in continue to replace and sometimes outperform human intelligence in decision-making processes, they have enabled number of problems to be tackled more effectively.This branching out of computational intelligence in several direct of intelligent systems in everyday applications have created the need for such an international conference which se to report on up-to-the-minute innovations and developments. This book collects both theory and application based aspects of artificial intelligence, from classical to intelligent scope. We hope that readers find the volume interestin it provides the state of the art intelligent methods and techniques for solving real world problems along with a visi research.

This book is a comprehensive collection of chapters focusing on the core areas of computing and their further appl real world. Each chapter is a paper presented at the Computing Conference 2021 held on 15-16 July 2021. Comput attracted a total of 638 submissions which underwent a double-blind peer review process. Of those 638 submissio submissions have been selected to be included in this book. The goal of this conference is to give a platform to res fundamental contributions and to be a premier venue for academic and industry practitioners to share new ideas a experiences. We hope that readers find this volume interesting and valuable as it provides the state-of-the-art inte and techniques for solving real-world problems. We also expect that the conference and its publications is a trigge related research and technology improvements in this important subject. .

Select Proceedings of ICAECT 2021
An executive's guide to AI and Intelligent Automation
ICTR 2021 4th International Conference on Tourism Research
12th International Conference, ICSI 2021, Qingdao, China, July 17–21, 2021, Proceedings, Part II
15th International Symposium, ISVC 2020, San Diego, CA, USA, October 5–7, 2020, Proceedings, Part II
Proceedings of the 23rd International Conference of the Catalan Association for Artificial Intelligence
RoboCup 2019: Robot World Cup XXIII

Working Machines - An executive's guide to AI and Intelligent Automation, takes a look at how the renewed vigour for the d Artificial Intelligence and Intelligent Automation technology has begun to change how businesses operate. It provides a step building your own AI and Intelligent Automation strategies and frameworks, while also giving you insight into the way it is c

across multiple industries. This extensive guide is brought to you by the minds behind WeAreBrain and Tur.ai, experts in the business automation fields.

This book constitutes the thoroughly refereed proceedings of the 39th National Conference of Theoretical Computer Science held in Yinchuan, China, in July 2021. The 67 full papers were carefully reviewed and selected from 145 submissions, and 14 selected for the volume. The papers present recent research in the areas of information hiding, data detection and recognition scheduling, time series prediction, and formal analysis.

The advent of connected, smart technologies for the built environment may promise a significant value that has to be reach city models. At the international level, the role of digital twin is strictly related to massive amounts of data that need to be proposes several challenges in terms of digital technologies capability, computing, interoperability, simulation, calibration, and In these terms, the development of 3D parametric models as digital twins to evaluate energy assessment of private and pub considered one of the main challenges of the last years. The ability to gather, manage, and communicate contents related to buildings for the development of smart cities must be considered a specificity in the age of connection to increase citizen a fields. The Handbook of Research on Developing Smart Cities Based on Digital Twins contains in-depth research focused on t methods, processes, and tools that can be adopted to achieve smart city goals. The book presents a valid medium for disser data management ICT methods related to smart city topics. While highlighting topics such as data visualization, a web-based ICT data-sharing methods, this book is ideally intended for researchers in the building industry, energy, and computer science fie administrators; building managers; and energy professionals along with practitioners, stakeholders, researchers, academicians interested in the implementation of smart technologies for the built environment.

This book reflects the latest research trends, methods and experimental results in the field of electrical and information tec transportation, which covers abundant state-of-the-art research theories and ideas. As a vital field of research that is highl developments in a number of technological domains, the subjects it covered include intelligent computing, information proces Communication Technology, Automatic Control, etc. The objective of the proceedings is to provide a major interdisciplinary fo researchers, engineers, academicians as well as industrial professionals to present the most innovative research and develop rail transportation electrical and information technologies. Engineers and researchers in academia, industry, and the governm explore an insight view of the solutions that combine ideas from multiple disciplines in this field. The volumes serve as an ex work for researchers and graduate students working on rail transportation, electrical and information technologies.

Proceedings of the 4th International Conference on Electrical and Information Technologies for Rail Transportation (EITRT) 2
Advances in Computational Intelligence and Informatics
Image Classification, Object Detection, and Face Recognition in Python
Applications in Electronics Pervading Industry, Environment and Society
Leverage deep learning to create powerful image processing apps with TensorFlow 2.0 and Keras

Artificial Intelligence in China

Advances in Electrical and Computer Technologies

This book brings together papers presented at The 2nd International Conference on Artificial Intelligence in China (ChinaAI) 2020, which provides a venue to disseminate the latest developments and to discuss the interactions and links between these multidisciplinary fields. Spanning topics covering all topics in artificial intelligence with new development in China, this book is aimed at undergraduate and graduate students in Electrical Engineering, Computer Science and Mathematics, researchers and engineers from academia and industry as well as government employees (such as NSF, DOD and DOE).

This book brings together papers from the 2019 International Conference on Communications, Signal Processing, and Systems, which was held in Urumqi, China, on July 20–22, 2019. Presenting the latest developments and discussing the interactions and links between these multidisciplinary fields, the book spans topics ranging from communications to signal processing and systems. It is chiefly intended for undergraduate and graduate students in electrical engineering, computer science and mathematics, researchers and engineers from academia and industry, as well as government employees.

Develop and optimize deep learning models with advanced architectures. This book teaches you the intricate details and subtleties of the algorithms that are at the core of convolutional neural networks. In Advanced Applied Deep Learning, you will study advanced topics on CNN and object detection using Keras and TensorFlow. Along the way, you will look at the fundamental operations in CNN, such as convolution and pooling, and then look at more advanced architectures such as inception networks, resnets, and many more. While the book discusses theoretical topics, you will discover how to work efficiently with Keras with many tricks and tips, including how to customize logging in Keras with custom callback classes, what is eager execution, and how to use it in your models. Finally, you will study how object detection works, and build a complete implementation of the YOLO (you only look once) algorithm in Keras and TensorFlow. By the end of the book you will have implemented various models in Keras and learned many advanced tricks that will bring your skills to the next level. What You Will Learn See how convolutional neural networks and object detection workSave weights and models on diskPause training and restart it at a later stage Use hardware acceleration (GPUs) in your codeWork with the Dataset TensorFlow abstraction and use pre-trained models and transfer learningRemove and add layers to pre-trained networks to adapt them to your specific projectApply pre-trained models such as Alexnet and VGG16 to new datasets Who This Book Is For Scientists and researchers with intermediate-to-advanced Python and machine learning know-how. Additionally, intermediate knowledge of Keras and TensorFlow is expected.

Conference Proceedings of 4th International Conference on Tourism Research

Frontiers in Animal Science – Highlights From Its First Year

Advances in Intelligent Information Hiding and Multimedia Signal Processing

Proceedings of SoCTA 2020, Volume 2

Functional Pavements

Convergence of Internet of Things and Blockchain Technologies

Proceedings of AMLTA 2021

Advances in Swarm Intelligence

This book includes high-quality papers presented at the Second International Symposium on Computer Vision and Machine Intelligence in Medical Image Analysis (ISCMM 2021), organized by Computer Applications Department, SMIT in collaboration with Department of Pathology, SMIMS, Sikkim, India, and funded by Indian Council of Medical Research, during 11 – 12 November 2021. It discusses common research problems and challenges in medical image analysis, such as deep learning methods. It also discusses how these theories can be applied to a broad range of application areas, including lung and chest x-ray, breast CAD, microscopy and pathology. The studies included mainly focus on the detection of events from biomedical signals.

This book provides a thorough overview of cutting-edge research on electronics applications relevant to industry, the environment, and society at large. It covers a broad spectrum of application domains, from automotive to space and from health to security, while devoting special attention to the use of embedded devices and sensors for imaging, communication and control. The book is based on the 2020 ApplePies Conference, held online in November 2020, which brought together researchers and stakeholders to consider the most significant current trends in the field of applied electronics and to debate visions for the future. Areas addressed by the conference included information communication technology; biotechnology and biomedical imaging; space; secure, clean and efficient energy; the environment; and smart, green and integrated transport. As electronics technology continues to develop apace, constantly meeting previously unthinkable targets, further attention needs to be directed toward the electronics applications and the development of systems that facilitate human activities. This book, written by industrial and academic professionals, represents a valuable contribution in this endeavor.

A practical guide to building high performance systems for object detection, segmentation, video processing, smartphone applications, and more Key FeaturesDiscover how to build, train, and serve your own deep neural networks with TensorFlow 2 and KerasApply modern solutions to a wide range of applications such as object detection and video analysisLearn how to run your models on mobile devices and web pages and improve their performanceBook Description Computer vision solutions are becoming increasingly common, making their way into fields such as health, automobile, social media, and robotics. This book will help you explore TensorFlow 2, the brand new version of Google's open source framework for machine learning. You will understand how to benefit from using convolutional neural networks (CNNs) for visual tasks. Hands-On Computer Vision with TensorFlow 2 starts with the fundamentals of computer vision and deep learning, teaching you how to build a neural network from scratch. You will discover the features that have made TensorFlow the most widely used AI library, along with its intuitive Keras interface. You'll then move on to building, training, and deploying CNNs efficiently. Complete with concrete code examples, the book demonstrates how to classify images with modern solutions, such as Inception and ResNet, and extract specific content using You Only Look Once (YOLO), Mask R-CNN, and U-Net. You will also build generative adversarial networks (GANs)

and variational autoencoders (VAEs) to create and edit images, and long short-term memory networks (LSTMs) to analyze videos. In the process, you will acquire advanced insights into transfer learning, data augmentation, domain adaptation, and mobile and web deployment, among other key concepts. By the end of the book, you will have both the theoretical understanding and practical skills to solve advanced computer vision problems with TensorFlow 2.0. What you will learnCreate your own neural networks from scratchClassify images with modern architectures including Inception and ResNetDetect and segment objects in images with YOLO, Mask R-CNN, and U-NetTackle problems faced when developing self-driving cars and facial emotion recognition systemsBoost your application's performance with transfer learning, GANs, and domain adaptationUse recurrent neural networks (RNNs) for video analysisOptimize and deploy your networks on mobile devices and in the browserWho this book is for If you're new to deep learning and have some background in Python programming and image processing, like reading/writing image files and editing pixels, this book is for you. Even if you're an expert curious about the new TensorFlow 2 features, you'll find this book useful. While some theoretical concepts require knowledge of algebra and calculus, the book covers concrete examples focused on practical applications such as visual recognition for self-driving cars and smartphone apps.
Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications
Computational Intelligence in Pattern Recognition
Artificial Intelligence on Medical Data
Advanced Machine Learning Technologies and Applications
Computer Vision
MUE/FutureTech 2019
Proceeding of the IIH-MSP 2021 & FITAT 2021, Kaohsiung, Taiwan, Volume 2