Learning Ibeacon

This book covers a wide range of important topics including but not limited to Technology Trends, Computing, Artificial Intelligence, Machine Vision, Communication, Security, e-Learning, and Ambient Intelligence and their applications to the real world. The sixth Future Technologies Conference 2021 was organized virtually and received a total of 531 submissions from academic pioneering researchers, scientists, industrial engineers, and students from all over the world. After a double-blind peer review process, 191 submissions have been selected to be included in these proceedings. One of the meaningful and valuable dimensions of this conference is the way it brings together a large group of technology geniuses in one venue to not only present breakthrough research in future technologies, but also to promote discussions and debate of relevant issues, challenges, opportunities and research findings. We hope that readers find the book interesting, exciting, and inspiring; it provides the state-of-the-art intelligent methods and techniques for solving real-world problems along with a vision of the future research.

The three-volume set LNCS 10277-10279 constitutes the refereed proceedings of the11th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2017, held as

part of the 19th International Conference on Human-Computer Interaction, HCII 2017, in Vancouver, BC, Canada in July 2017, jointly with 14 other thematically similar conferences. The total of 1228 papers presented at the HCII 2017 conferences were carefully reviewed and selected from 4340 submissions. The papers included in the three UAHCI 2017 volumes address the following major topics: Design for All Methods and Practice; Accessibility and Usability Guidelines and Evaluation; User and Context Modelling and Monitoring and Interaction Adaptation; Design for Children; Sign Language Processing; Universal Access to Virtual and Augmented Reality; Non Visual and Tactile Interaction; Gesture and Gaze-Based Interaction; Universal Access to Health and Rehabilitation; Universal Access to Education and Learning; Universal Access to Mobility; Universal Access to Information and Media; and Design for Quality of Life Technologies.

Learn the key standards—iBeacon, Eddystone, Bluetooth 4.0, and AltBeacon—and how they work with other proximity technologies. Then build your understanding of the proximity framework and how to identify and deploy the best solutions for your own business, institutional, or consulting needs. Proximity technology—in particular, Bluetooth beacons—is a major source of business opportunity, and this book provides everything you need to know to architect a

solution to capitalize on that opportunity. What You'll Learn Understand the disruptive implications of digital–physical convergence and the new applications it makes possible Review the key standards that solutions developers need to understand to capitalize on the business opportunity of proximity technology Discover the new phenomenon of beacon networks, which will be hugely significant in driving strategic decisions and creating wealth See other technologies in the proximity ecosystem catalyzed by and complementary to Bluetooth beacons, including visual light communication, magnetic resonance, and RFID Examine the Beacosystem framework for analyzing the proximity ecosystem Who This Book Is For Solutions architects of all types—venture capitalists, founders, CEOs, strategists, product managers, CTOs, business developers, and programmers Stephen Statler is a writer, public speaker, and consultant working in the beacon ecosystem. He trains and advises retailers, venue owners, VCs, as well as makers of beacon software and hardware, and is a thought leader in the beacosystem community. Previously he was the Senior Director for Strategy and Solutions Management at Qualcomm's Retail Solutions Division, helping to incubate Gimbal, one of the leading Bluetooth beacons in the market. He is also the CEO of Cause Based Solutions, creators of Give

the Change, democratizing philanthropy, enabling non-profit supporters to donate the change from charity branded debit cards, and developer of The Good Traveler program. Contributors: Anke Audenaert, CEO, Favrit John Coombs, CEO, Rover Labs Theresa Mary Gordon, Co-Founder, tapGOconnect Phil Hendrix, Director, immr Kris Kolodziej, President, IndoorLBS Patrick Leddy, CEO, Pulsate Ben Parker, VP Business Development, AccelerateIT Mario Proietti, CEO, Location Smart Ray Rotolo, SVP OOH, Gimbal Kjartan Slette, COO, Unacast Jarno Vanto, Partner, Borenius Attorneys LLP David Young, Chief Engineer, Radius Networks Foreword by Asif Khan, President LBMA

This book is intended for iOS developers who are curious to learn about iBeacon and want to start building applications for iOS. You will gain everything you need to know to master indoor location functionality using Bluetooth beacon technology. No knowledge of iBeacon is assumed.

This book constitutes the refereed proceedings of the First Eurasian BIM Forum, EBF 2019, held in Istanbul, Turkey, in May 2019. The 16 full papers were carefully reviewed and selected from 44 submissions. The papers cover such topics as ?BIM adoption and implementation; BIM for project management; BIM for sustainability and performative design; BIM and facility management and infrastructural issues.

The REV conference aims to discuss the fundamentals, applications and experiences in remote engineering, virtual instrumentation and related new technologies, as well as new concepts for education on these topics, including emerging technologies in learning, MOOCs & MOOLs, Open Resources, and STEM pre-university education. In the last 10 years, remote solutions based on Internet technology have been increasingly deployed in numerous areas of research, science, industry, medicine and education. With the new focus on cyber-physical systems, Industry 4.0, Internet of Things and the digital transformation in industry, economy and education, the core topics of the REV conference have become indispensable elements of a future digitized society. REV 2018, which was held at the University of Applied Sciences in Duesseldorf from 21–23 March 2018, addressed these topics as well as state-of-the-art and future trends.

Interactive mobile technologies have now become the core of many—if not all—fields of society. Not only do the younger generation of students expect a mobile working and learning environment, but also the new ideas, technologies and solutions introduced on a nearly daily basis also boost this trend. Discussing and assessing key trends in the mobile field were the primary aims of the 11th International Conference on Interactive Mobile Communication, Technologies and Learning (IMCL2017), which was

held in Thessaloniki from 30 November to 01 December 2017. Since being founded in 2006, the conference has been devoted to new approaches in interactive mobile technologies, with a focus on learning. The IMCL conferences have in the meanwhile become a central forum of the exchange of new research results and relevant trends, as well as best practices. This book contains papers in the fields of: Future Trends and Emerging Mobile Technologies Design and Development of Mobile Learning Apps and Content Mobile Games—Gamification and Mobile Learning Adaptive Mobile Environments Augmented Reality and Immersive Applications Tangible, Embedded and Embodied Interaction Interactive Collaborative and Blended Learning Digital Technology in Sports Mobile Health Care and Training Multimedia Learning in Music Education 5G Network Infrastructure Case Studies Real-World Experiences The content will appeal to a broad readership, including policymakers, academics, educators, researchers in pedagogy and learning theory, school teachers, the learning industry, further education lecturers, etc.

These proceedings represent the work of researchers participating in the 10th International Conference on e-Learning (ICEL 2015) which is being hosted this year by the College of the Bahamas, Nassau on the 25-26 June 2015. ICEL is

a recognised event on the International research conferences calendar and provides a valuable platform for individuals to present their research findings, display their work in progress and discuss conceptual advances in the area of e-Learning. It provides an important opportunity for researchers and managers to come together with peers to share their experiences of using the varied and expanding range of e-Learning available to them. With an initial submission of 91 abstracts, after the double blind, peer review process there are 41 academic Research papers and 2 PhD papers Research papers published in these Conference Proceedings. These papers come from some many different countries including: Australia, Belgium, Brazil, Canada, China, Germany, Greece, Hong Kong, Malaysia, Portugal, Republic of Macedonia, Romania, Slovakia, South Africa, Sweden, United Arab Emirates, UK and the USA. A selection of the best papers – those agreed by a panel of reviewers and the editor will be published in a conference edition of EJEL (the Electronic Journal of e-Learning www.ejel.com). These will be chosen for their quality of writing and relevance to the Journal's objective of publishing papers that offer new insights or practical help into the application e-Learning.

This book provides much new thinking on the phenomenon of whole-person education, a phenomenon which features strongly in East Asian

universities, and which aims to develop students intellectually, spiritually, and ethically, to master critical thinking skills, to explore ethical challenges in the surrounding community, and to acquire a broad based foundation of knowledge in humanities, society, and nature. The book considers different approaches to whole person education, including Confucian, Buddhist, and Chinese perspectives, Western philosophy, and religion and interdisciplinary approaches. Overall, the book provides a comprehensive overview of whole person education, why it matters and how to implement it. Moreover, although the examples in the book are from East Asia, the discussion and the values involved are universal, important for the whole world.
This book constitutes the refereed proceedings of the 11th International Conference on Blended Learning, ICBL 2018, held in Osaka, Japan, in July/ August 2018. The 35 papers presented were carefully reviewed and selected from 94 submissions. The papers are organized in topical sections named: Experiences in Blended Learning, Content Development for Blended Learning, Assessment for Blended Learning, Computer-Support Collaborative Learning, Improved Flexibility of Learning Processes, Open Educational Resources, and Pedagogical and Psychological Issues.
This volume constitutes the refereed proceedings of

the 7th International Conference on Virtual, Augmented and Mixed Reality, VAMR 2015, held as part of the 17th International Conference on Human-Computer Interaction, HCI 2015, held in Los Angeles, CA, USA, in August 2015. The total of 1462 papers and 246 posters presented at the HCII 2015 conferences was carefully reviewed and selected from 4843 submissions. These papers address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The papers thoroughly cover the entire field of human-computer interaction, addressing major advances in knowledge and effective use of computers in a variety of application areas. The 54 papers included in this volume are organized in the following topical sections: user experience in virtual and augmented environments; developing virtual and augmented environments; agents and robots in virtual environments; VR for learning and training; VR in Health and Culture; industrial and military applications.

This book reports on the state of the art in physical ergonomics and addresses the design of products, processes, services, and work systems to ensure they are productive, safe, and enjoyable for people to use. The human body’s responses to physical and physiological work demands, strain injuries from repetition, vibration, force, and posture are the most common types of issues examined, along with their

design implications. The book explores a wide range of topics in physical ergonomics, including the consequences of repetitive motion, materials handling, workplace safety, the usability of portable devices, design, working postures, and the work environment. Mastering physical ergonomics and safety engineering concepts is fundamental to creating products and systems that people can safely and conveniently use, as well as avoiding stresses and minimizing the risk of accidents. Based on the AHFE 2018 Conference on Physical Ergonomics and Human Factors, held on July 21–25, 2018, in Orlando, Florida, USA, this book provides readers with a comprehensive perspective on the current challenges in physical ergonomics, which is a critical aspect in the design of any human-centered technological system, and for factors influencing human performance.

The term Intelligent Environments (IEs) refers to the physical spaces in which IT and other pervasive computing technologies are integrated and used to achieve specific goals for the user, the environment or both. The ultimate objectives of IEs are enriching user experience, enabling better management and increasing user awareness of that environment. This book presents the proceedings of the 13th International Conference on Intelligent Environments, held in Seoul, Korea, in August 2017. The conference provides a multidisciplinary

collaborative forum for researchers and practitioners from computer science, electronic engineering, building architecture, art and design, sociology, government and education to present theoretical and practical results related to the development and applications of Intelligent Environments. IE’17 focuses on the development of advanced Intelligent Environments, as well as other newly emerging and rapidly evolving topics. The book also includes the proceedings of the following associated workshops, held during the first 2 days of the conference, which emphasize the multi-disciplinary and transversal aspects of IEs: the 6th International Workshop on the Reliability of Intelligent Environments (WoRIE'17); the 1st International Workshop on Intelligent Systems for Agricultural Production and Environmental Protection (ISAPEP’17); the 1st Workshop on Citizen Centric Smart Cities Solutions (CCSCS'17); and the 1st International Workshop on Advanced Multiple Access in Mobile Telecommunications (AMAMT'17). Providing a state-of-the-art overview of the discipline, this book will be of interest to professionals from a diversity of fields whose work involves the development or application of Intelligent Environments.

Interaction Design explores common pitfalls, effective workflows and innovative development techniques in contemporary interaction design by tracking projects from initial idea to the critical and

commercial reception of the finished project. The book is divided into six chapters, each focusing on different aspects of the interaction design industry. Exploring design projects from around the world, the authors include examples of the processes and creative decisions behind: – Apps, games and websites – Responsive branding – Complex, large-scale services – Interactive museum installations – Targeted promotions – Digital products which influence real-world situations Each case study includes behind-the-scenes development design work, interviews with key creatives and workshop projects to help you start implementing the techniques and working practices discussed in your own interaction design projects. From immersive tourist experiences, to apps which make day-to-day life easier, the detailed coverage of the design process shows how strategists, creatives and technologists are working with interactive technologies to create the engaging projects of the future.

This book introduces the advanced technologies used for authentic learning, an educational term that refers to a variety of techniques focusing on how students apply the skills and knowledge acquired in school in real-world situations. In the meanwhile, it presents the latest trends and future developments in learning design, learning environment and assessment for authentic learning using advances in

technology, this book discusses how technology supports authentic learning and what makes it effective.

This book focuses on the interplay between pedagogy and technology, and their fusion for the advancement of smart learning environments. It discusses various components of this interplay, including learning and assessment paradigms, social factors and policies, emerging technologies, innovative application of mature technologies, transformation of curriculum and teaching behavior, transformation of administration, best infusion practices, and piloting of new ideas. The book provides an archival forum for researchers, academics, practitioners and industry professionals interested and/or engaged in reforming teaching and learning methods by promoting smart learning environments. It also facilitates discussions and constructive dialogue among various stakeholders on the limitations of existing learning environments, the need for reform, innovative uses of emerging pedagogical approaches and technologies, and sharing and promoting best practices, leading to the evolution, design and implementation of smart learning environments.

This book focuses on the implementation of digital strategies in the public sectors in the US, Mexico, Brazil, India and Germany. The case studies presented examine different digital projects by looking at their

impact as well as their alignment with their national governments' digital strategies. The contributors assess the current state of digital government, analyze the contribution of digital technologies in achieving outcomes for citizens, discuss ways to measure digitalization and address the question of how governments oversee the legal and regulatory obligations of information technology. The book argues that most countries formulate good strategies for digital government, but do not effectively prescribe and implement corresponding policies and programs. Showing specific programs that deliver results can help policy makers, knowledge specialists and public-sector researchers to develop best practices for future national strategies.

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Internet of Things (IoT) products and cyber-physical systems (CPS) are being utilized in almost every discipline and there continues to be significant increases in spending on design, development, and deployment of IoT applications and analytics within every domain, from our homes, schools, government, and industry. This practical text provides an introduction to IoT that can be understood by every engineering discipline and discusses detailed applications of IoT. Developed to help engineers navigate this increasingly important and cross-

disciplinary topic, this work: Offers research-based examples and case studies to facilitate the understanding of each IoT primitive Highlights IoT's connection to blockchain Provides and understanding of benefits and challenges of IoT and its importance to a variety of engineering disciplines Written to be accessible to non-experts in the subject, What Every Engineer Should Know About the Internet of Things communicates the importance of this technology and how it can support and challenge all interrelated actors as well as all involved assets across many domains.

As more users expect to use their mobile devices, librarians will want and need to develop the necessary skills to reach this growing user base. Mobile Devices: A Practical Guide for Librarians will aid libraries and librarians as they go through the process of planning, developing, implementing, marketing, and evaluating mobile services.

This book shows how tablets (and smartphones) using a variety of selected 'apps', can enhance fieldwork and other out-of-classroom activities. The authors review imaginative uses of tablets from their own project and as well as examples from other colleagues. To help readers keep abreast of new technology and innovative ways to use it, the book is supported by a web site and a social media community.

ESSENTIALS OF MARKETING RESEARCH, 6E, provides a concise, yet complete guide to the design, execution, analysis, and reporting of marketing research to support smart business decisions. Covering essential principles and techniques in a streamlined, engaging

way, the text equips students with the core knowledge and skills needed to manage marketing research effectively. This proven text provides valuable business context while introducing both traditional research methods, such as designing questionnaires, and the latest technological advances, including current data collection devices, basic data analysis tools, practical approaches to data analytics, and the impact of social media and artifactual online data. Designed specifically for instructors who prefer a concise introduction to marketing research topics, the Sixth Edition of this trusted text features updates based on recent trends and technology, including an increased emphasis on ethical and international issues, reflecting their growing importance in modern marketing research. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This book constitutes the thoroughly refereed post-workshop proceedings of the First International Symposium, SETE 2016, held in conjunction with ICWL 2016, Rome, Italy, in October 2016. The 81 revised papers, 59 full and 22 short ones, were carefully reviewed and selected from 139 submission. They cover latest findings in various areas, such as emerging technologies for open access to education and learning; emerging technologies supported personalized and adaptive learning; emerging technologies support for intelligent tutoring; emerging technologies support for game-based and joyful learning; emerging technologies of pedagogical issues; emerging technologies for

affective learning and emerging technologies for tangible learning.

Current hype aside, the Internet of Things will ultimately become as fundamental as the Internet itself, with lots of opportunities and trials along the way. To help you navigate these choppy waters, this practical guide introduces a dedicated methodology for businesses preparing to transition towards IoT-based business models. With a set of best practices based on case study analysis, expert interviews, and the authors' own experience, the Ignite | IoT Methodology outlined in this book delivers actionable guidelines to assist you with IoT strategy management and project execution. You'll also find a detailed case study of a project fully developed with this methodology. This book consists of three parts: Illustrative case studies of selected IoT domains, including smart energy, connected vehicles, manufacturing and supply chain management, and smart cities The Ignite | IoT Methodology for defining IoT strategy, preparing your organization for IoT adoption, and planning and executing IoT projects A detailed case study of the IIC Track & Trace testbed, one of the first projects to be fully developed according to the Ignite | IoT Methodology

The internet of things (IoT) has emerged to address the need for connectivity and seamless integration with other devices as well as big data platforms for analytics. However, there are challenges that IoT-based applications face including design and implementation issues; connectivity problems; data gathering, storing, and analyzing in cloud-based environments; and IoT security and privacy issues. Emerging Trends in IoT and Integration with Data Science, Cloud

Computing, and Big Data Analytics is a critical reference source that provides theoretical frameworks and research findings on IoT and big data integration. Highlighting topics that include wearable sensors, machine learning, machine intelligence, and mobile computing, this book serves professionals who want to improve their understanding of the strategic role of trust at different levels of the information and knowledge society. It is therefore of most value to data scientists, computer scientists, data analysts, IT specialists, academicians, professionals, researchers, and students working in the field of information and knowledge management in various disciplines that include but are not limited to information and communication sciences, administrative sciences and management, education, sociology, computer science, etc. Moreover, the book provides insights and supports executives concerned with the management of expertise, knowledge, information, and organizational development in different types of work communities and environments.

Explore the game-changing technology that allows mobile learningto effectively reach K-12 students Mobile Learning: A Handbook for Developers, Educators andLearners provides research-based foundations for developing,evaluating, and integrating effective mobile learning pedagogy.Twenty-first century students require twenty-first centurytechnology, and mobile devices provide new and effective ways toeducate children. But with new technologies come new challenges—therefore,this handbook presents a comprehensive look at mobile learning bysynthesizing relevant theories and drawing practical conclusionsfor developers, educators, and students. Mobile devices—in ways that the laptop, the personalcomputer, and netbook computers have not—present theopportunity to make learning more engaging, interactive, andavailable in both traditional

classroom settings and informallearning environments. From theory to practice, MobileLearning explores how mobile devices are different than theirtechnological predecessors, makes the case for developers,teachers, and parents to invest in the technology, and illustratesthe many ways in which it is innovative, exciting, and effective ineducating K-12 students. Explores how mobile devices can support the needs ofstudents Provides examples, screenshots, graphics, and visualizations toenhance the material presented in the book Provides developers with the background necessary to create theapps their audience requires Presents the case for mobile learning in and out of classroomsas early as preschool Discusses how mobile learning enables better educationalopportunities for the visually impaired, students with Autism, andadult learners. If you're a school administrator, teacher, app developer, orparent, this topical book provides a theoretical, well-researcheddiscussion of the pedagogical theory and mobile learning, as wellas practical advice in setting up a mobile learning strategy.

Marco Altpeter beschäftigt sich mit neuen Technologien für Location-based Services, wie bspw. (Bluetooth-)Beacons, und deren Einsatzmöglichkeiten im Marketing. Da eine kundenindividuelle Ansprache per Smartphone die Akzeptanz der Kunden voraussetzt, identifiziert der Autor empirisch Determinanten der Akzeptanz neuer Technologien am Beispiel von Location-based Advertising aus Konsumentensicht und untersucht sie auf der Grundlage der Strukturgleichungsmodellanalyse.

This volume constitutes the refereed proceedings of the 5th International Conference of the Immersive Learning Network, iLRN 2019, held in London, UK, in June 2019. The 18 revised full papers and presented in this volume were carefully reviewed and selected from 60 submissions. The papers are organized in topical sections on science, technology,

engineering, and mathematics (STEM); disciplinary applications: special education; disciplinary applications: history; pedagogical strategies; immersion and presence.
The two-volume set LNCS 10273 and 10274 constitutes the refereed proceedings of the thematic track on Human Interface and the Management of Information, held as part of the 19th HCI International 2017, in Vancouver, BC, Canada, in July 2017. HCII 2017 received a total of 4340 submissions, of which 1228 papers were accepted for publication after a careful reviewing process. The 102 papers presented in these volumes were organized in topical sections as follows: Part I: Visualization Methods and Tools; Information and Interaction Design; Knowledge and Service Management; Multimodal and Embodied Interaction. Part II: Information and Learning; Information in Virtual and Augmented Reality; Recommender and Decision Support Systems; Intelligent Systems; Supporting Collaboration and User Communities; Case Studies.
This book focuses on the emerging areas of information networking and its applications, presenting the latest innovative research and development techniques from both theoretical and practical perspectives. Today’s networks and information systems are evolving rapidly, and there are new trends and applications in information networking, such as wireless sensor networks, ad hoc networks, peer-to-peer systems, vehicular networks, opportunistic networks, grid and cloud computing, pervasive and ubiquitous computing, multimedia systems, security, multi-agent systems, high-speed networks, and web-based systems. However, since these networks need to be capable of managing the increasing number of users, provide support for different services, guarantee the QoS, and optimize the network resources, a number of research issues and challenges have to be considered in order to provide solutions.

Creating Holistic Technology-Enhanced Learning Experiences: Tales of a Future School in Singapore Editors: Lee Yong TAY & Cher Ping LIM The global level of economic, ecological, social, political and cultural integration across nation states and the rapid advancement of technology have brought about transformations that are part of globalisation. Our students are expected to be agents of change rather than passive observers of world events; and at the same time, to live together in an increasingly diverse and complex society and to reflect on and interpret fast changing information. In such a new world order, the holistic development of our students, namely in the cognitive, aesthetics, physical, social and moral, leadership and global domains, is pivotal. This edited book provides descriptive and interpretive accounts of how an elementary school in the FutureSchools@Singapore programme creates holistic technology-enhanced learning experiences for its students at the classroom and school levels. By documenting these accounts and linking them to student learning outcomes, the school will lead the way in providing possible models for the seamless and pervasive integration of information and communication technologies (ICT) into the curriculum for the holistic development of our students.

Get up to speed on Cocoa and Objective-C, and start developing applications on the iOS and OS X platforms. If you don’t have experience with Apple’s developer tools, no problem! From object-oriented programming to storing app data in iCloud, the fourth edition of this book covers everything you need to build apps for the iPhone, iPad, and Mac. You’ll learn how to work with the Xcode IDE, Objective-C’s Foundation library, and other developer tools such as Event Kit framework and Core Animation. Along the way, you’ll build example projects, including a simple Objective-C application, a custom view, a simple video player application,

and an app that displays calendar events for the user. Learn the application lifecycle on OS X and iOS Work with the user-interface system in Cocoa and Cocoa Touch Use AV Foundation to display video and audio Build apps that let users create, edit, and work with documents Store data locally with the file system, or on the network with iCloud Display lists or collections of data with table views and collection views Interact with the outside world with Core Location and Core Motion Use blocks and operation queues for multiprocessing

This book constitutes the refereed post-conference proceedings of the 10th International Conference on Broadband Communications, Networks, and Systems, Broadnets 2019, which took place in Xi'an, China, in October 2019. The 19 full papers presented were carefully reviewed and selected from 61 submissions. The papers are thematically grouped as follows: Wireless Networks and Applications, Communication and Sensor Networks, Internet of Things, Pervasive Computing, Security and Privacy.

Cooperative and Graph Signal Processing: Principles and Applications presents the fundamentals of signal processing over networks and the latest advances in graph signal processing. A range of key concepts are clearly explained, including learning, adaptation, optimization, control, inference and machine learning. Building on the principles of these areas, the book then shows how they are relevant to understanding distributed communication, networking and sensing and social networks. Finally, the book shows how the principles are applied to a range of applications, such as Big data, Media and video, Smart grids, Internet of Things, Wireless health and Neuroscience. With this book readers will learn the basics of adaptation and learning in networks, the essentials of detection, estimation and filtering, Bayesian inference in networks, optimization and control, machine

learning, signal processing on graphs, signal processing for distributed communication, social networks from the perspective of flow of information, and how to apply signal processing methods in distributed settings. Presents the first book on cooperative signal processing and graph signal processing Provides a range of applications and application areas that are thoroughly covered Includes an editor in chief and associate editor from the IEEE Transactions on Signal Processing and Information Processing over Networks who have recruited top contributors for the book

Symmetry-adapted machine learning has shown encouraging ability to mitigate the security risks in information and communication technology (ICT) systems. It is a subset of artificial intelligence (AI) that relies on the principles of processing future events by learning past events or historical data. The autonomous nature of symmetry-adapted machine learning supports effective data processing and analysis for security detection in ICT systems without the interference of human authorities. Many industries are developing machine-learning-adapted solutions to support security for smart hardware, distributed computing, and the cloud. In our Special Issue book, we focus on the deployment of symmetry-adapted machine learning for information security in various application areas. This security approach can support effective methods to handle the dynamic nature of security attacks by extraction and analysis of data to identify hidden patterns of data. The main topics of this Issue include malware classification, an intrusion detection system, image watermarking, color image watermarking, battlefield target aggregation behavior recognition model, IP camera, Internet of Things (IoT) security, service function chain, indoor positioning system, and crypto-analysis.

In recent years, the use of technology has become increasingly integrated into classroom settings. By utilizing

new innovations, students can be provided with a deeper learning experience. Digital Tools for Seamless Learning is a pivotal reference source for the latest scholarly material on the implementation of technology in modern classrooms and provides a thorough overview of how such applications assist in the learning process. Highlighting pedagogical approaches, theoretical foundations, and curriculum development strategies, this book is ideally designed for teachers, researchers, professionals, upper-level students, and practitioners actively involved in the education field.

This book demonstrates how the outdoor environment is enriching learning opportunities for children and deepening their connections with the natural world.

The use of mobile technology for learning in organizations and the workplace is spreading widely with the development of infrastructure and devices that allow ubiquitous learning and training. Since learning, teaching, and training in a mobile-saturated environment is a developing field, implications for a combined overview of these topics may be beneficial both for research and practice in the broader view of a user's lifespan. Mobile Technologies in Educational Organizations is a collection of innovative research on the methods and applications of mobile technologies in learning and training and explores best practices of mobile learning in organizations and the workplace. While highlighting topics including ethics, informal education, and virtual reality, this book is ideally designed for teachers, administrators, principals, higher education professionals, instructional designers, curriculum developers, managers, researchers, and students.