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This book constitutes the refereed proceedings of the 6th International Conference, ICISP 2014, held in June/July 2014 in Cherbourg, France. The 76 revised full papers were carefully reviewed and selected from 164 submissions. The contributions are organized in topical sections on multispectral colour science, color imaging and applications, digital cultural heritage, document image analysis, graph-based representations, image filtering and representation, computer vision and pattern recognition, computer graphics, biomedical, and signal processing.

This book is a printed edition of the Special Issue "Remote Sensing and Geosciences for Archaeology" that was published in Geosciences

Situated Learning is generally understood as a context-dependent approach to translator and interpreter training under which learners are exposed to real-life and/or highly simulated collaborative work environments and tasks, both inside and outside the classroom. Ultimately, Situated Learning seeks to enhance learners' capacity to think and act like professionals. This book sets out to gauge the extent to which different factors influence the implementation of Situated Learning models in various teaching and learning contexts. It presents an understanding of Situated Learning that goes

beyond previous interpretations of this notion, traditionally dominated by the discussion of pedagogical practices in authentic, i.e. real-world, or semi-authentic professional settings. This wider remit of Situated Learning encompasses previously underrepresented contextual factors pertaining to translation traditions, historical trends, community beliefs and customs, socio-economic constraints, market conditions, institutional practices, budgetary issues, or resource availability. The pedagogical considerations of these key aspects make this book particularly useful for both novice and seasoned teachers of translation and interpreting with an interest in informed practical advice on how to implement the principles of Situated Learning in collaborative teaching and learning environments that seek to promote translators' and/or interpreters' professional competence. This book was originally published as a special issue of The Interpreter and Translator Trainer.

Control Engineering and Information Systems contains the papers presented at the 2014 International Conference on Control Engineering and Information Systems (ICCEIS 2014, Yueyang, Hunan, China, 20-22 June 2014). All major aspects of the theory and applications of control engineering and information systems are addressed, including: – Intelligent systems – Teaching cases – Pattern recognition – Industry application – Machine learning

– Systems science and systems engineering – Data mining – Optimization – Business process management – Evolution of public sector ICT – IS economics – IS security and privacy – Personal data markets – Wireless ad hoc and sensor networks – Database and system security – Application of spatial information system – Other related areas Control Engineering and Information Systems provides a valuable source of information for scholars, researchers and academics in control engineering and information systems.

Perceptual learning can be defined as a long lasting improvement in a perceptual skill following a systematic training, due to changes in brain plasticity at the level of sensory or perceptual areas. Its efficacy has been reported for a number of visual tasks, such as detection or discrimination of visual gratings (De Valois, 1977; Fiorentini & Berardi, 1980, 1981; Mayer, 1983), motion direction discrimination (Ball & Sekuler, 1982, 1987; Ball, Sekuler, & Machamer, 1983), orientation judgments (Fahle, 1997; Shiu & Pashler, 1992; Vogels & Orban, 1985), hyperacuity (Beard, Levi, & Reich, 1995; Bennett & Westheimer, 1991; Fahle, 1997; Fahle & Edelman, 1993; Kumar & Glaser, 1993; McKee & Westheimer, 1978; Saarinen & Levi, 1995), visual search tasks (Ahissar & Hochstein, 1996; Casco, Campana, & Gidiuli, 2001; Campana & Casco, 2003; Ellison & Walsh, 1998; Sireteanu & Rettenbach, 1995) or

texture discrimination (Casco et al., 2004; Karni & Sagi, 1991, 1993). Perceptual learning is long-lasting and specific for basic stimulus features (orientation, retinal position, eye of presentation) suggesting a long-term modification at early stages of visual analysis, such as in the striate (Karni & Sagi, 1991; 1993; Saarinen & Levi, 1995; Pourtois et al., 2008) and extrastriate (Ahissar & Hochstein, 1996) visual cortex. Not confined to a basic research paradigm, perceptual learning has recently found application outside the laboratory environment, being used for clinical treatment of a series of visually impairing conditions such as amblyopia (Levi & Polat, 1996; Levi, 2005; Levi & Li, 2009, Polat et al., 2004; Zhou et al., 2006), myopia (Tan & Fong, 2008) or presbyopia (Polat, 2009). Different authors adopted different paradigms and stimuli in order to improve malfunctioning visual abilities, such as Vernier Acuity (Levi, Polat & Hu, 1997), Gratings detection (Zhou et al., 2006), oculomotor training (Rosengarth et al., 2013) and lateral interactions (Polat et al., 2004). The common result of these studies is that a specific training produces not only improvements in trained functions, but also in other, untrained and higher-level visual functions, such as visual acuity, contrast sensitivity and reading speed (Levi et al, 1997a, 1997b; Polat et al., 2004; Polat, 2009; Tan & Fong, 2008). More recently (Maniglia et al. 2011), perceptual learning with the lateral interactions

paradigm has been successfully used for improving peripheral vision in normal people (by improving contrast sensitivity and reducing crowding, the interference in target discrimination due to the presence of close elements), offering fascinating new perspectives in the rehabilitation of people who suffer of central vision loss, such as maculopathy patients, partially overcoming the structural differences between fovea and periphery that limit the vision outside the fovea. One of the strongest point, and a distinguishing feature of perceptual learning, is that it does not just improve the subject's performance, but produces changes in brain's connectivity and efficiency, resulting in long-lasting, enduring neural changes. By tailoring the paradigms on each subject's needs, perceptual learning could become the treatment of choice for the rehabilitation of visual functions, emerging as a simple procedure that doesn't need expensive equipment.

This book is a printed edition of the Special Issue "Photon-Counting Image Sensors" that was published in Sensors

This well-written textbook discusses the concepts, principles and applications of Computer Graphics in a simple, precise and systematic manner. It explains how to manipulate visual and geometric information by using the computational techniques. It also incorporates several experiments to be performed in computer graphics and multimedia labs.

Reports of the death of reading are greatly exaggerated Do you worry that you've lost patience for anything longer than a tweet? If so, you're not alone. Digital-age pundits warn that as our appetite for books dwindles, so too do the virtues in which printed, bound objects once trained us: the willpower to focus on a sustained argument, the curiosity to look beyond the day's news, the willingness to be alone. The shelves of the world's great libraries, though, tell a more complicated story. Examining the wear and tear on the books that they contain, English professor Leah Price finds scant evidence that a golden age of reading ever existed. From the dawn of mass literacy to the invention of the paperback, most readers already skimmed and multitasked. Print-era doctors even forbade the very same silent absorption now recommended as a cure for electronic addictions. The evidence that books are dying proves even scarcer. In encounters with librarians, booksellers and activists who are reinventing old ways of reading, Price offers fresh hope to bibliophiles and literature lovers alike.

Remote sensing data and techniques have been widely used for disaster monitoring and assessment. In particular, recent advances in sensor technologies and artificial intelligence-based modeling are very promising for disaster monitoring and readying responses aimed at reducing the damage caused by disasters. This book contains eleven scientific papers that have studied novel approaches applied to a range of natural disasters such as forest fire, urban land subsidence, flood, and tropical cyclones.

Bring your digital adventures to life with real-world craft projects inspired by the world of Minecraft® and other pixelated games. Kids and families can use this imaginative book to create instantly recognizable toys, jewelry, wearables, and accessories, based on one of the most popular video games of all time. The blocky pixelated graphics of video

games are perfect for so many different kinds of crafts. This book helps children to expand their imaginations and develop their creativity as they acquire creative hobbies that will last a lifetime. Choly Knight shows how to make quick and easy versions of popular characters and game elements, using only a few basic craft supplies. Inside this book she offers 15 fun step-by-step projects for perler beads, duct tape, paper crafting, painting, sewing, and crocheting.

These volumes constitute the Proceedings of the 6th International Workshop on Soft Computing Applications, or SOFA 2014, held on 24-26 July 2014 in Timisoara, Romania. This edition was organized by the University of Belgrade, Serbia in conjunction with Romanian Society of Control Engineering and Technical Informatics (SRAIT) - Arad Section, The General Association of Engineers in Romania - Arad Section, Institute of Computer Science, Iasi Branch of the Romanian Academy and IEEE Romanian Section. The Soft Computing concept was introduced by Lotfi Zadeh in 1991 and serves to highlight the emergence of computing methodologies in which the accent is on exploiting the tolerance for imprecision and uncertainty to achieve tractability, robustness and low solution cost. Soft computing facilitates the use of fuzzy logic, neurocomputing, evolutionary computing and probabilistic computing in combination, leading to the concept of hybrid intelligent systems. The combination of such intelligent systems tools and a large number of applications introduce a need for a synergy of scientific and technological disciplines in order to show the great potential of Soft Computing in all domains. The conference papers included in these proceedings, published post conference, were grouped into the following area of research: · Image, Text and Signal Processing Intelligent Transportation Modeling and Applications Biomedical Applications Neural Network and Applications

Knowledge-Based Technologies for Web Applications, Cloud Computing, Security, Algorithms and Computer Networks Knowledge-Based Technologies Soft Computing Techniques for Time Series Analysis Soft Computing and Fuzzy Logic in Biometrics Fuzzy Applications Theory and Fuzzy Control Business Process Management Methods and Applications in Electrical Engineering The volumes provide useful information to professors, researchers and graduated students in area of soft computing techniques and applications, as they report new research work on challenging issues.

Video is the main driver of bandwidth use, accounting for over 80 per cent of consumer Internet traffic. Video compression is a critical component of many of the available multimedia applications, it is necessary for storage or transmission of digital video over today's band-limited networks. The majority of this video is coded using international standards developed in collaboration with ITU-T Study Group and MPEG. The MPEG family of video coding standards begun on the early 1990s with MPEG-1, developed for video and audio storage on CD-ROMs, with support for progressive video. MPEG-2 was standardized in 1995 for applications of video on DVD, standard and high definition television, with support for interlaced and progressive video. MPEG-4 part 2, also known as MPEG-2 video, was standardized in 1999 for applications of low- bit rate multimedia on mobile platforms and the Internet, with the support of object-based or content based coding by modeling the scene as background and foreground. Since MPEG-1, the main video coding standards were based on the so-called macroblocks. However, research groups continued the work beyond the traditional video coding architectures and found that macroblocks could limit the performance of the compression when using high-resolution video. Therefore, in 2013 the high efficiency video coding (HEVC) also known and H.265, was released, with a

structure similar to H.264/AVC but using coding units with more flexible partitions than the traditional macroblocks. HEVC has greater flexibility in prediction modes and transform block sizes, also it has a more sophisticated interpolation and de blocking filters. In 2006 the VC-1 was released. VC-1 is a video codec implemented by Microsoft and the Microsoft Windows Media Video (VMW) 9 and standardized by the Society of Motion Picture and Television Engineers (SMPTE). In 2017 the Joint Video Experts Team (JVET) released a call for proposals for a new video coding standard initially called Beyond the HEVC, Future Video Coding (FVC) or known as Versatile Video Coding (VVC). VVC is being built on top of HEVC for application on Standard Dynamic Range (SDR), High Dynamic Range (HDR) and 360° Video. The VVC is planned to be finalized by 2020. This book presents the new VVC, and updates on the HEVC. The book discusses the advances in lossless coding and covers the topic of screen content coding. Technical topics discussed include: Beyond the High Efficiency Video CodingHigh Efficiency Video Coding encoderScreen contentLossless and visually lossless coding algorithmsFast coding algorithmsVisual quality assessmentOther screen content coding algorithmsOverview of JPEG Series

This book is a printed edition of the Special Issue "Earth Observations for Geohazards" that was published in Remote Sensing)

The 2014 International Conference on Industrial Engineering and Manufacturing Technology (ICIEMT 2014) was held July 10-11, 2014 in Shanghai, China. The objective of ICIEMT 2014 was to provide a platform for researchers, engineers, academics as well as industry professionals from all over the world to present their research results and development

The six-volume set LNCS 8579-8584 constitutes the

refereed proceedings of the 14th International Conference on Computational Science and Its Applications, ICCSA 2014, held in Guimarães, Portugal, in June/July 2014. The 347 revised papers presented in 30 workshops and a special track were carefully reviewed and selected from 1167 initial submissions. The 289 papers presented in the workshops cover various areas in computational science ranging from computational science technologies to specific areas of computational science such as computational geometry and security.

The 4th International Conference on Electronic, Communications and Networks (CECNet2014) inherits the fruitfulness of the past three conferences and lays a foundation for the forthcoming next year in Shanghai. CECNet2014 was hosted by Hubei University of Science and Technology, China, with the main objective of providing a comprehensive global foru

This proceedings volume contains selected papers presented at the 2014 International Conference on Future Mechatronics and Automation, held in Beijing, China. Contributions cover the latest developments and advances in the field of Mechatronics and Automation.

This two-volume book contains research work presented at the First International Conference on Data Engineering and Communication Technology

(ICDECT) held during March 10–11, 2016 at Lavasa, Pune, Maharashtra, India. The book discusses recent research technologies and applications in the field of Computer Science, Electrical and Electronics Engineering. The aim of the Proceedings is to provide cutting-edge developments taking place in the field data engineering and communication technologies which will assist the researchers and practitioners from both academia as well as industry to advance their field of study.

An important part of the colossal effort associated with the understanding of the brain involves using electronics hardware technology in order to reproduce biological behavior in ‘silico’. The idea revolves around leveraging decades of experience in the electronics industry as well as new biological findings that are employed towards reproducing key behaviors of fundamental elements of the brain (notably neurons and synapses) at far greater speed-scale products than any software-only implementation can achieve for the given level of modelling detail. So far, the field of neuromorphic engineering has proven itself as a major source of innovation towards the ‘silicon brain’ goal, with the methods employed by its community largely focused on circuit design (analogue, digital and mixed signal) and standard, commercial, Complementary Metal-Oxide Silicon (CMOS) technology as the preferred `tools of choice’ when trying to simulate or emulate

biological behavior. However, alongside the circuit-oriented sector of the community there exists another community developing new electronic technologies with the express aim of creating advanced devices, beyond the capabilities of CMOS, that can intrinsically simulate neuron- or synapse-like behavior. A notable example concerns nanoelectronic devices responding to well-defined input signals by suitably changing their internal state ('weight'), thereby exhibiting `synapse-like' plasticity. This is in stark contrast to circuit-oriented approaches where the `synaptic weight' variable has to be first stored, typically as charge on a capacitor or digitally, and then appropriately changed via complicated circuitry. The shift of very much complexity from circuitry to devices could potentially be a major enabling factor for very-large scale `synaptic electronics', particularly if the new devices can be operated at much lower power budgets than their corresponding 'traditional' circuit replacements. To bring this promise to fruition, synergy between the well-established practices of the circuit-oriented approach and the vastness of possibilities opened by the advent of novel nanoelectronic devices with rich internal dynamics is absolutely essential and will create the opportunity for radical innovation in both fields. The result of such synergy can be of potentially staggering impact to the progress of our efforts to both simulate the brain and ultimately

understand it. In this Research Topic, we wish to provide an overview of what constitutes state-of-the-art in terms of enabling technologies for very large scale synaptic electronics, with particular stress on innovative nanoelectronic devices and circuit/system design techniques that can facilitate the development of very large scale brain-inspired electronic systems

This book describes the development of a new low-cost medium wavelength IR (MWIR) monolithic imager technology for high-speed uncooled industrial applications. It takes the baton on the latest technological advances in the field of vapor phase deposition (VPD) PbSe-based MWIR detection accomplished by the industrial partner NIT S.L., adding fundamental knowledge on the investigation of novel VLSI analog and mixed-signal design techniques at circuit and system levels for the development of the readout integrated device attached to the detector. In order to fulfill the operational requirements of VPD PbSe, this work proposes null inter-pixel crosstalk vision sensor architectures based on a digital-only focal plane array (FPA) of configurable pixel sensors. Each digital pixel sensor (DPS) cell is equipped with fast communication modules, self-biasing, offset cancellation, analog-to-digital converter (ADC) and fixed pattern noise (FPN) correction. In-pixel power consumption is minimized by the use of

comprehensive MOSFET subthreshold operation. High Performance Silicon Imaging covers the fundamentals of silicon image sensors, with a focus on existing performance issues and potential solutions. The book considers several applications for the technology as well. Silicon imaging is a fast growing area of the semiconductor industry. Its use in cell phone cameras is already well established, and emerging applications include web, security, automotive, and digital cinema cameras. Part one begins with a review of the fundamental principles of photosensing and the operational principles of silicon image sensors. It then focuses in on charged coupled device (CCD) image sensors and complementary metal oxide semiconductor (CMOS) image sensors. The performance issues considered include image quality, sensitivity, data transfer rate, system level integration, rate of power consumption, and the potential for 3D imaging. Part two then discusses how CMOS technology can be used in a range of areas, including in mobile devices, image sensors for automotive applications, sensors for several forms of scientific imaging, and sensors for medical applications. High Performance Silicon Imaging is an excellent resource for both academics and engineers working in the optics, photonics, semiconductor, and electronics industries. Covers the fundamentals of silicon-based image sensors and technical advances, focusing on performance

issues Looks at image sensors in applications such as mobile phones, scientific imaging, TV broadcasting, automotive, and biomedical applications

This book constitutes the refereed post-conference proceedings of 3 workshops, held at the 24th International Conference on Pattern Recognition, Beijing, China, in August 2018: the Third International Workshop on Computer Vision for Analysis of Underwater Imagery, CVAUI 2018, the 7th International Workshop on Computational Forensics, IWCF 2018, and the International Workshop on Multimedia Information Processing for Personality and Social Networks Analysis, MIPPSNA 2018.The 16 full papers presented in this book were carefully reviewed and selected from 23 submissions. CVAUI Workshop: The analysis of underwater imagery imposes a series of unique challenges, which need to be tackled by the computer vision community in collaboration with biologists and ocean scientists. IWCF Workshop: With the advent of high-end technology, fraudulent efforts are on rise in many areas of our daily life, may it be fake paper documents, forgery in the digital domain or copyright infringement. In solving the related criminal cases use of pattern recognition (PR) principles is also gaining an important place because of their ability in successfully assisting the forensic experts to solve many of such cases.

MIPPSNA Workshop: Its goal is to compile the latest research advances on the analysis of multimodal information for facing problems that are not visually obvious, this is, problems for which the sole visual analysis is insufficient to provide a satisfactory solution.

This book contains some selected papers from the International Conference on Extreme Learning Machine 2014, which was held in Singapore, December 8-10, 2014. This conference brought together the researchers and practitioners of Extreme Learning Machine (ELM) from a variety of fields to promote research and development of "learning without iterative tuning". The book covers theories, algorithms and applications of ELM. It gives the readers a glance of the most recent advances of ELM.

The three-volume set LNCS 11857, 11858, and 11859 constitutes the refereed proceedings of the Second Chinese Conference on Pattern Recognition and Computer Vision, PRCV 2019, held in Xi'an, China, in November 2019. The 165 revised full papers presented were carefully reviewed and selected from 412 submissions. The papers have been organized in the following topical sections: Part I: Object Detection, Tracking and Recognition, Part II: Image/Video Processing and Analysis, Part III: Data Analysis and Optimization.

All over the world, governments, policymakers, and

educators are advocating the need to educate students for the 21st first century. This book provides insights into what this means and the ways 21st century education is theorized and implemented in practice. The first part, “Perspectives: Mapping our futures-in-the-making,” uncovers the contradictions, tensions and processes that shape 21st century education discourses. The second part, “Policies: Constructing the future through policymaking,” discusses how 21st century education is translated into policies and the resulting tensions that emerge from top-down, state sanctioned policies and bottom-up initiatives. The third part, “Practices: Enacting the Future in Local Contexts,” discusses on-the-ground initiatives that schools in various countries around the world enact to educate their students for the 21st century. This volume includes contributions from leading scholars in the field as well as educators from schools and those working with schools.
Efforts to build, rebuild and maintain the Forum Romanum, Rome's historic urban epicenter, are likely as old as the place it self - some 2800 years. As a result the historic significance and archaeological richness of the Forum cannot be overestimated. Despite its many changes the Forum Romanum's survival today represents an outstanding example of cultural heritage continuity. Its highest possible protection status among monuments conservation agencies in Italy and its

early listing on UNESCO's World Heritage List in 1980 are testaments to this. Due to its remarkable physical survival, the Forum Romanum has been the object of extensive research, documentation, restoration and preservation efforts over the past two centuries especially. The sophistication of these measures evolved to include a wide range of expertise. Lay interest among antiquarians and architects in Rome's past from the Renaissance through the eighteenth century was supplanted by the emerging new disciplines of archaeology, architectural restoration and museology. From the late nineteenth century corresponding advancements in archaeological method and conservation theory and science were increasingly applied. From this time on as well, expectations for preserving and presenting the Forum Romanum were high, the famous site being a matter of intense Roman pride, political interest, and serving as a must see' destination for visitors to Rome. Leading historians, archaeologists and conservators have been central to the story of the Forum's survival and interpretation. While numerous noted antiquarians and historians preceded him the architect and archaeologist Giocomo Boni (1859-1925) was unusual, even prescient, in his approach and treatment of the place during his tenure as director of excavations of the Forum Romanum from 1898 until 1925. His combined talents as an architect,

archaeologist and conservator set a standard at the time for careful research, thorough documentation, and responsible conservation measures. The sponsors of the DHARMA conference have wisely chosen to focus on archaeological research and conservation in the Forum during Giacomo Boni's tenure since his work reflects early best practices' in researching, preserving and interpreting such places. To frame the discussion some precedents and influences of the work of Giacomo Boni are offered.

Almost as soon as 'club culture' took hold - during the UK's Second Summer of Love in 1988 - its sociopolitical impact became clear, with journalists, filmmakers and authors all keen to use this cultural context as source material for their texts. This book uses that electronic music subculture as a route into an analysis of these principally literary representations of a music culture: why such secondary artefacts appear and what function they serve. The book conceives of a new literary genre to accommodate these stories born of the dancefloor - 'dancefloor-driven literature'. Using interviews with Irvine Welsh, author of Trainspotting (1994), alongside other dancefloor-driven authors Nicholas Blincoe and Jeff Noon as case studies, the book analyzes three separate ways writers draw on electronic dance music in their fictions, interrogating that very particular intermedial intersection between

the sonic and the linguistic. It explores how such authors write about something so subterranean as the nightclub scene, and analyses what specific literary techniques they deploy to write lucidly and fluidly about the metronomic beat of electronic music and the chemical accelerant that further alters that relationship.

The two-volume set LNCS 8525-8526 constitutes the refereed proceedings of the 6th International Conference on Virtual, Augmented and Mixed Reality, VAMR 2014, held as part of the 16th International Conference on Human-Computer Interaction, HCI 2014, in Heraklion, Crete, Greece, in June 2014, jointly with 13 other thematically similar conferences. The total of 1476 papers and 220 posters presented at the HCII 2014 conferences were carefully reviewed and selected from 4766 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 total of 82 contributions included in the VAMR proceedings were carefully reviewed and selected for inclusion in this two-volume set. The 39 papers included in this volume are organized in the following topical sections: interaction devices, displays and

techniques in VAMR; designing virtual and augmented environments; avatars and virtual characters; developing virtual and augmented environments.

This volume presents the proceedings of the First Euro-China Conference on Intelligent Data Analysis and Applications (ECC 2014), which was hosted by Shenzhen Graduate School of Harbin Institute of Technology and was held in Shenzhen City on June 13-15, 2014. ECC 2014 was technically co-sponsored by Shenzhen Municipal People's Government, IEEE Signal Processing Society, Machine Intelligence Research Labs, VSB-Technical University of Ostrava (Czech Republic), National Kaohsiung University of Applied Sciences (Taiwan), and Secure E-commerce Transactions (Shenzhen) Engineering Laboratory of Shenzhen Institute of Standards and Technology.

This three-volume set LNCS 11139-11141 constitutes the refereed proceedings of the 27th International Conference on Artificial Neural Networks, ICANN 2018, held in Rhodes, Greece, in October 2018. The papers presented in these volumes was carefully reviewed and selected from total of 360 submissions. They are related to the following thematic topics: AI and Bioinformatics, Bayesian and Echo State Networks, Brain Inspired Computing, Chaotic Complex Models, Clustering, Mining, Exploratory Analysis, Coding Architectures,

Complex Firing Patterns, Convolutional Neural Networks, Deep Learning (DL), DL in Real Time Systems, DL and Big Data Analytics, DL and Big Data, DL and Forensics, DL and Cybersecurity, DL and Social Networks, Evolving Systems – Optimization, Extreme Learning Machines, From Neurons to Neuromorphism, From Sensation to Perception, From Single Neurons to Networks, Fuzzy Modeling, Hierarchical ANN, Inference and Recognition, Information and Optimization, Interacting with The Brain, Machine Learning (ML), ML for Bio Medical systems, ML and Video-Image Processing, ML and Forensics, ML and Cybersecurity, ML and Social Media, ML in Engineering, Movement and Motion Detection, Multilayer Perceptrons and Kernel Networks, Natural Language, Object and Face Recognition, Recurrent Neural Networks and Reservoir Computing, Reinforcement Learning, Reservoir Computing, Self-Organizing Maps, Spiking Dynamics/Spiking ANN, Support Vector Machines, Swarm Intelligence and Decision-Making, Text Mining, Theoretical Neural Computation, Time Series and Forecasting, Training and Learning.

This volume constitutes the thoroughly refereed post-conference proceedings of the 8th International Conference on Mathematical Methods for Curves and Surfaces, MMCS 2012, held in Oslo, Norway, in June/July 2012. The 28 revised full papers

presented were carefully reviewed and selected from 135 submissions. The topics range from mathematical analysis of various methods to practical implementation on modern graphics processing units. The papers reflect the newest developments in these fields and also point to the latest literature.

This book is a printed edition of the Special Issue "Sustainable Smart Cities and Smart Villages Research" that was published in Sustainability

Coal and Peat Fires: A Global Perspective, Volumes 1–4, presents a fascinating collection of research about prehistoric and historic coal and peat fires. Magnificent illustrations of fires and research findings from countries around the world are featured—a totally new contribution to science. This third of four volumes in the collection, Coal Fires – Case Studies, examines in detail specific coal fires chronicled in a number of locations around the world including Brazil, the Czech Republic, Germany, Malawi, Poland, Russia, Spain, Tajikistan, the United States, Venezuela, and others. Authored by world-renowned experts in coal and peat fires Global in scope—countries from around the world are represented Includes beautiful color illustrations, lively presentations, important research data, and informative videos

This Special Issue is a collection of papers addressing the scientific use of data acquired in the

course of the TerraSAR-X mission 10 years after launch. The articles deal with the mission itself, the accuracy of the products, with differential interferometry, and with applications in the domains cryosphere, oceans, wetlands, and urban areas. This book (CCIS 899) constitutes the refereed proceedings of the First International Conference on Applications of Computing and Communication Technologies, ICACCT 2018, held in Delhi, India, in March 2018. The 30 full papers were carefully reviewed and selected from 109 submissions. The papers are organized in topical sections on communication and system technologies, computing and network technologies, application and services.