Get Free Computational Approaches To Assistive Technologies For People With Disabilities Frontiers In Artificial Intelligence

Yeah, reviewing a books **Computational Approaches To Assistive Technologies For People With Disabilities Frontiers In Artificial Intelligence** could go to your close connections listings. This is just one of the solutions for you to be successful. As understood, triumph does not suggest that you have wonderful points.

Comprehending as without difficulty as treaty even more than additional will manage to pay for each success. next to, the publication as capably as insight of this Computational Approaches To Assistive Technologies For People With Disabilities Frontiers In Artificial Intelligence can be taken as competently as picked to act.

KEY=IN - PRATT SIDNEY

COMPUTATIONAL APPROACHES TO ASSISTIVE TECHNOLOGIES FOR PEOPLE WITH DISABILITIES

IOS Press *Assistive technologies have become increasingly important for people with disabilities in recent years. This book is the result of over a decade of research into computational approaches to assistive technology. Its chapters are based on a number of graduate theses, successfully completed over the past dozen or so years under the supervision of Kanlaya Naruedomkul of Mahidol University in Bangkok, Thailand and Nick Cercone of York University, Toronto, Canada. Some applications in the chapters use Thai language examples, but the techniques employed are not restricted to any single language. Each chapter is based on the Ph.D. work of a former or current student, suitably updated and presented for interested readers. The book is divided into four sections. Following an introduction, which includes a review of assistive technology products, part two covers applications, and includes chapters on alternative sign text MT for language learning, lexical simplification using word sense disambiguation and detecting and rating dementia through lexical analysis of spontaneous speech. Part three deals with theories and systems, and includes: granules for learning behavior, rough sets methods and applications for medical data and multimedia support systems as assistive technology for hearing impaired students. Part four presents a conclusion which includes a look into the future. Although this book is not a comprehensive treatise on assistive technology, it nevertheless provides a fascinating look at recent research, and will be of interest to*

all those whose work involves the application of assistive technologies for people with disabilities.

ASSISTIVE TECHNOLOGY FOR COGNITION

A HANDBOOK FOR CLINICIANS AND DEVELOPERS

Psychology Press *Assistive technology for cognition is technology which can be used to enable, enhance, or extend cognitive function. This book systematically examines how cutting-edge digital technologies can assist the cognitive function of people with cognitive impairments, with the potential to revolutionize rehabilitation. Technologies are reviewed which direct attention, remind, recognize, prompt, and generally guide people through activities of daily living. Written by experts in neuropsychology and technology development, Assistive Technology for Cognition provides a comprehensive overview of the efficacy of technologies to assist people with brain impairments. Based on the list provided by the International Classification of Function, each chapter covers a different cognitive function; namely, attention, memory, affect, perception, executive function, language, numeracy, sequencing, and navigation onto which existing and future assistive technologies for cognition are mapped. This structure provides in-depth research in an accessible way, and will allow practitioners to move from an assessment of cognitive deficits to the prescription of an appropriate assistive technology for cognition. The chapters also make suggestions for future developments. Assistive Technology for Cognition will be of great interest to clinicians and researchers working in brain injury rehabilitation, technology developers, and also to students in clinical psychology, neuropsychology, and allied health disciplines.*

CONTACTLESS HUMAN ACTIVITY ANALYSIS

Springer Nature *This book is a truly comprehensive, timely, and very much needed treatise on the conceptualization of analysis, and design of contactless & multimodal sensor-based human activities, behavior understanding & intervention. From an interaction design perspective, the book provides views and methods that allow for more safe, trustworthy, efficient, and more natural interaction with technology that will be embedded in our daily living environments. The chapters in this book cover sufficient grounds and depth in related challenges and advances in sensing, signal processing, computer vision, and mathematical modeling. It covers multi-domain applications, including surveillance and elderly care that will be an asset to entry-level and practicing engineers and scientists.(See inside for the reviews from top experts)*

COMPUTATIONAL DEPENDENCY THEORY

IOS Press *Dependencies – directed labeled graph structures representing hierarchical relations between morphemes, words, and semantic units – are the standard representation in many fields of computational linguistics. The linguistic significance of these structures often remains vague, however, and those working in the field stress the need for the development of a common notational and formal basis.*

Although dependency analysis has become quasi-hegemonic in Natural Language Processing (NLP), the connection between computational linguistics and dependency linguists remains sporadic. But theoretical dependency linguists and computational linguists have much to share. This book presents papers from the International Conference on Dependency Linguistics (Depling 2011) held in Barcelona, Spain, in September 2011. Beginning with what may be the first formal definition of dependency structure, the book continues with papers covering subjects such as: the interface of the syntactic structures with semantics; mapping semantic structures to text surface by means of statistical language generation; formalization of dependency; advances in dependency parsing; and the link between statistical and rule-based dependency parsing. This comprehensive collection gives a coherent overview of recent advances in the interplay of linguistics and natural language engineering around dependency grammars, ranging from definitional challenges of syntactic functions to formal grammars, tree bank development, and parsing issues

COMPUTERS HELPING PEOPLE WITH SPECIAL NEEDS

14TH INTERNATIONAL CONFERENCE, ICCHP 2014, PARIS, FRANCE, JULY 9-11, 2014, PROCEEDINGS, PART I

Springer *The two-volume set LNCS 8547 and 8548 constitutes the refereed proceedings of the 14th International Conference on Computers Helping People with Special Needs, ICCHP 2014, held in Paris, France, in July 2014. The 132 revised full papers and 55 short papers presented were carefully reviewed and selected from 362 submissions. The papers included in the first volume are organized in the following topical sections: accessible media; digital content and media accessibility; 25 years of the Web: weaving accessibility; towards e-inclusion for people with intellectual disabilities; the impact of PDF/UA on accessible PDF; accessibility of non-verbal communication; emotions for accessibility (E4A), games and entertainment software; accessibility and therapy; implementation and take-up of e-accessibility; accessibility and usability of mobile platforms for people with disabilities and elderly persons; portable and mobile platforms for people with disabilities and elderly persons; people with cognitive disabilities: At, ICT and AAC; autism: ICT and AT; access to mathematics, science and music and blind and visually impaired people: AT, HCI and accessibility.*

INTELLIGENT DECISION TECHNOLOGIES

PROCEEDINGS OF THE 5TH KES INTERNATIONAL CONFERENCE ON INTELLIGENT DECISION TECHNOLOGIES (KES-IDT 2013)

IOS Press *The field of intelligent decision technologies is interdisciplinary in nature, bridging computer science with its development of artificial intelligence, information systems with its development of decision support systems, and engineering with its development of systems. This book presents the 45 papers accepted for presentation at the 5th KES International Conference on Intelligent Decision Technologies (KES-IDT 2013), held in Sesimbra, Portugal, in June 2013. The conference consists of keynote talks, oral and poster presentations, invited sessions*

and workshops on the applications and theory of intelligent decision systems and related areas. The conference provides an opportunity for the presentation and discussion of interesting new research results, promoting knowledge transfer and the generation of new ideas. The book will be of interest to all those whose work involves the development and application of intelligent decision systems.

DSS 2.0 - SUPPORTING DECISION MAKING WITH NEW TECHNOLOGIES

IOS Press *Advances in technology have resulted in new and advanced methods to support decision-making. For example, artificial intelligence has enabled people to make better decisions hrough the use of Intelligent Decision Support Systems (DSS). Emerging research in DSS demonstrates that decision makers can operate in a more timely manner using real-time data, more accurately due to data mining and 'big data' methods, more strategically by considering a greater number of factors, more precisely and inclusively due to the availability of social networking data, and with a wider media reach with video and audio technology._x000D_ _x000D_This book presents the proceedings of the IFIP TC8/Working Group 8.3 conference held at the Université Pierre et Marie Curie in Paris, France, in June 2014. Throughout its history the conference has aimed to present the latest innovations and achievements in Decision Support Systems. This year the conference looks to the next generation with the theme of new technologies to enable DSS2.0. The topics covered include theoretical, empirical and design science research; case-based approaches in decision support systems; decision models in the real-world; healthcare information technology; decision making theory; knowledge management; knowledge and resource discovery; business intelligence; group decision support systems; collaborative decision making; analytics and 'big data'; rich language for decision support; multimedia tools for DSS; Web 2.0 systems in decision support; context-based technologies for decision making; intelligent systems and technologies in decision support; organizational decision support; research methods in DSS 2.0; mobile DSS; competing on analytics; and social media analytics._x000D_ _x000D_ The book will be of interest to all those who develop or use Decision Support Systems. The variety of methods and applications illustrated by this international group of carefully reviewed papers should provide ideas and directions for future researchers and practitioners alike.*

CASES ON SERVICE DELIVERY IN SPECIAL EDUCATION PROGRAMS

IGI Global *Educators are continually pressured to create interesting and educational lessons for students of varying learning abilities. While technology steadily improves classroom learning, education systems struggle to develop more innovative teaching methods for students with disabilities. Cases on Service Delivery in Special Education Programs compiles real-world case studies on successful classroom models and practices to provide rewarding learning environments for students with disabilities. Addressing topics such as behavior modification, social development, and teacher collaboration, this publication is an essential reference source for special education teachers, supervisors, directors, administrators, principles, and policymakers, as well as academicians and researchers interested in developing special education*

programs within school districts and classrooms.

ECAI 2014

21ST EUROPEAN CONFERENCE ON ARTIFICIAL INTELLIGENCE

IOS Press *The role of artificial intelligence (AI) applications in fields as diverse as medicine, economics, linguistics, logical analysis and industry continues to grow in scope and importance. AI has become integral to the effective functioning of much of the technical infrastructure we all now take for granted as part of our daily lives. This book presents the papers from the 21st biennial European Conference on Artificial Intelligence, ECAI 2014, held in Prague, Czech Republic, in August 2014. The ECAI conference remains Europe's principal opportunity for researchers and practitioners of Artificial Intelligence to gather and to discuss the latest trends and challenges in all subfields of AI, as well as to demonstrate innovative applications and uses of advanced AI technology. Included here are the 158 long papers and 94 short papers selected for presentation at the conference. Many of the papers cover the fields of knowledge representation, reasoning and logic as well as agent-based and multi-agent systems, machine learning, and data mining. The proceedings of PAIS 2014 and the PAIS System Demonstrations are also included in this volume, which will be of interest to all those wishing to keep abreast of the latest developments in the field of AI.*

UNIVERSAL ACCESS IN HUMAN-COMPUTER INTERACTION: UNIVERSAL ACCESS TO INFORMATION AND KNOWLEDGE

8TH INTERNATIONAL CONFERENCE, UAHCI 2014, HELD AS PART OF HCI INTERNATIONAL 2014, HERAKLION, CRETE, GREECE, JUNE 22-27, 2014, PROCEEDINGS, PART II

Springer *The four-volume set LNCS 8513-8516 constitutes the refereed proceedings of the 8th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2014, held as part of the 16th International Conference on Human-Computer Interaction, HCII 2014, held in Heraklion, Crete, Greece in June 2014, jointly with 14 other thematically similar conferences. The total of 1476 papers and 220 posters presented at the HCII 2014 conferences was 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 251 contributions included in the UAHCI proceedings were carefully reviewed and selected for inclusion in this four-volume set. The 65 papers included in this volume are organized in the following topical sections: access to mobile interaction; access to text, documents and media; access to education and learning; access to games and ludic engagement and access to culture.*

SMART DIGITAL FUTURES 2014

IOS Press *The interdisciplinary field of smart digital systems is crucial to modern computer science, encompassing artificial intelligence, information systems and engineering. For over a decade the mission of KES International has been to provide publication opportunities for all those who work in knowledge intensive subjects. The conferences they run worldwide are aimed at facilitating the dissemination, transfer, sharing and brokerage of knowledge in a number of leading edge technologies. _x000D_ This book presents some 80 papers selected after peer review for inclusion in three KES conferences, held as part of the Smart Digital Futures 2014 (SDF-14) multi-theme conference in Chania, Greece, in June 2014. The three conferences are: Intelligent Decision Technologies (KES-IDT-14), Intelligence Interactive Multimedia Systems and Services (KES-IIMSS-14), and Smart Technology-based Education and Training (KES-STET-14). _x000D_ The book will be of interest to all those whose work involves the development and application of intelligent digital systems.*

INFORMATION MODELLING AND KNOWLEDGE BASES XXV

IOS Press *Because of our ever increasing use of and reliance on technology and information systems, information modelling and knowledge bases continue to be important topics in those academic communities concerned with data handling and computer science. As the information itself becomes more complex, so do the levels of abstraction and the databases themselves. This book is part of the series Information Modelling and Knowledge Bases, which concentrates on a variety of themes in the important domains of conceptual modeling, design and specification of information systems, multimedia information modeling, multimedia systems, ontology, software engineering, knowledge and process management, knowledge bases, cross-cultural communication and context modeling. Theoretical disciplines, including cognitive science, artificial intelligence, logic, linguistics and analytical philosophy, also receive attention. The selected papers presented here cover many areas of information modeling and knowledge bases including: theory of concepts, semantic computing, data mining, context-based information retrieval, ontological technology, image databases, temporal and spatial databases, document data management, software engineering, cross-cultural computing, environmental analysis, social networks, WWW information management, and many others. This new issue also contains papers initiated by the panels on: “Cross-cultural Communication with Icons and Images” and “Conceptual Modelling of Collaboration for Information Systems”. The book will be of interest to all those interested in advances in research and applications in the academic disciplines concerned.*

LEGAL KNOWLEDGE AND INFORMATION SYSTEMS

JURIX 2013: THE TWENTY-SIXTH ANNUAL CONFERENCE

IOS Press *In the same way that it has become part of all our lives, computer technology is now integral to the work of the legal profession. The JURIX Foundation has been organizing annual international conferences in the area of computer science and law since 1988, and continues to support cutting-edge research and*

applications at the interface between law and computer technology. This book contains the 16 full papers and 6 short papers presented at the 26th International Conference on Legal Knowledge and Information Systems (JURIX 2013), held in December 2013 in Bologna, Italy. The papers cover a wide range of research topics and application areas concerning the advanced management of legal information and knowledge, including computational techniques for: classifying and extracting information from, and detecting conflicts in, regulatory texts; modeling legal argumentation and representing case narratives; improving the retrieval of legal information and extracting information from legal case texts; conducting e-discovery; and, applications involving intellectual property and IP licensing, online dispute resolution, delivering legal aid to the public and organizing the administration of local law and regulations. The book will be of interest to all those associated with the legal profession whose work involves the use of computer technology.

INTELLIGENT INTERACTIVE MULTIMEDIA SYSTEMS AND SERVICES

PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON INTELLIGENT INTERACTIVE MULTIMEDIA SYSTEMS AND SERVICES (IIMSS2013)

IOS Press *At a time when computers are more widespread than ever, intelligent interactive systems have become a necessity. The term ‘multimedia systems’ refers to the coordinated storage, processing, transmission and retrieval of multiple forms of information, such as audio, image, video, animation, graphics and text. The growth of multimedia services has been exponential, as technological progress keeps up with the consumer’s need for content. The solution of 'one fits all' is no longer appropriate for the wide ranges of users with various backgrounds and needs, so one important goal of many intelligent interactive systems is dynamic personalization and adaptivity to users. This book presents 37 papers summarizing the work and new research results presented at the 6th International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS2013), held in Sesimbra, Portugal, in June 2013. The conference series focuses on research in the fields of intelligent interactive multimedia systems and services and provides an internationally respected forum for scientific research in related technologies and applications.*

ARTIFICIAL INTELLIGENCE RESEARCH AND DEVELOPMENT

PROCEEDINGS OF THE 16TH INTERNATIONAL CONFERENCE OF THE CATALAN ASSOCIATION FOR ARTIFICIAL INTELLIGENCE

IOS Press *For almost twenty years the Catalan Association of Artificial Intelligence (ACIA) has been promoting cooperation between researchers in artificial intelligence within the Catalan speaking community. This book presents the proceedings of the 16th International Conference (CCIA 2013), held at the University of Vic (UVIC), Catalonia, Spain, in October 2013. This annual conference aims to foster discussion*

of the latest developments in artificial intelligence within the community of Catalan countries, as well as amongst members of the AI community worldwide. The book contains the 26 full papers, 5 short papers and 12 poster presentations from the conference, which are grouped under the following topics: relational learning, planning; satisfiability and constraints; perception and image processing; preprocessing; patterns extraction and learning; post-processing, model interpretability and decision support; recommenders, similarity and CBR; and multiagent systems.

TWELFTH SCANDINAVIAN CONFERENCE ON ARTIFICIAL INTELLIGENCE

SCAI 2013

IOS Press *Artificial intelligence has become so much a part of everyday life that it is now hard to imagine a world without it. This book presents papers from the 12th Scandinavian Conference on Artificial Intelligence (SCAI), held in Aalborg, Denmark in November 2013. The SCAI conference is the main biennial platform for the AI research community in Scandinavia, and the papers collected here not only include contributions from Scandinavia, but also from other European and non-European countries. Topics cover the entire range of AI, with a particular focus on machine learning and knowledge representation, as well as uncertainty in AI and applications. In addition to the 28 regular papers, extended abstracts of the presentations made by Ph.D. students of their research-in-progress to a panel of experts in the doctoral symposium – a new feature at this conference – are also included here. This book will be of interest to all those who wish to keep up-to-date with the latest developments in artificial intelligence.*

COMPUTATIONAL METHODS AND DATA ENGINEERING

PROCEEDINGS OF ICCMDE 2021

Springer Nature *The book features original papers from International Conference on Computational Methods and Data Engineering (ICCMDE 2021), organized by School of Computer Science and Engineering, Vellore Institute of Technology, Vellore, Tamil Nadu, India, during November 25–26, 2021. The book covers innovative and cutting-edge work of researchers, developers, and practitioners from academia and industry working in the area of advanced computing.*

UNIVERSAL ACCESS IN HUMAN-COMPUTER INTERACTION. DESIGN APPROACHES AND SUPPORTING TECHNOLOGIES

14TH INTERNATIONAL CONFERENCE, UAHCI 2020, HELD AS PART OF THE 22ND HCI INTERNATIONAL CONFERENCE, HCII 2020, COPENHAGEN, DENMARK, JULY 19–24, 2020, PROCEEDINGS, PART I

Springer Nature *This two-volume set of LNCS 12188 and 12189 constitutes the refereed proceedings of the 14th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2020, held as part of the 22nd International*

Conference, HCI International 2020, which took place in Copenhagen, Denmark, in July 2020. The conference was held virtually due to the COVID-19 pandemic. The total of 1439 papers and 238 posters have been accepted for publication in the HCII 2020 proceedings from a total of 6326 submissions. UAHCI 2020 includes a total of 80 regular papers which are organized in topical sections named: Design for All Theory, Methods and Practice; User Interfaces and Interaction Techniques for Universal Access; Web Accessibility; Virtual and Augmented Reality for Universal Access; Robots in Universal Access; Technologies for Autism Spectrum Disorders; Technologies for Deaf Users; Universal Access to Learning and Education; Social Media, Digital Services, eInclusion and Innovation; Intelligent Assistive Environments.

COMPUTATIONAL APPROACHES FOR HUMAN-HUMAN AND HUMAN-ROBOT SOCIAL INTERACTIONS

Frontiers Media SA

TECHNOLOGY ENHANCED LEARNING FOR PEOPLE WITH DISABILITIES: APPROACHES AND APPLICATIONS

APPROACHES AND APPLICATIONS

IGI Global "*This book brings together academics, policy-makers and practitioners, with the goal of delivering a reference edition for all those interested in approaches and applications of technology enhanced learning for people with disabilities*"--*Provided by publisher.*

PROCEEDINGS OF THE 20TH CONGRESS OF THE INTERNATIONAL ERGONOMICS ASSOCIATION (IEA 2018)

VOLUME VII: ERGONOMICS IN DESIGN, DESIGN FOR ALL, ACTIVITY THEORIES FOR WORK ANALYSIS AND DESIGN, AFFECTIVE DESIGN

Springer *This book presents the proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018), held on August 26-30, 2018, in Florence, Italy. By highlighting the latest theories and models, as well as cutting-edge technologies and applications, and by combining findings from a range of disciplines including engineering, design, robotics, healthcare, management, computer science, human biology and behavioral science, it provides researchers and practitioners alike with a comprehensive, timely guide on human factors and ergonomics. It also offers an excellent source of innovative ideas to stimulate future discussions and developments aimed at applying knowledge and techniques to optimize system performance, while at the same time promoting the health, safety and wellbeing of individuals. The proceedings include papers from researchers and practitioners, scientists and physicians, institutional leaders, managers and policy makers that contribute to constructing the Human Factors and Ergonomics approach across a variety of methodologies, domains and productive sectors. This volume includes papers addressing the following topics: Ergonomics in Design, Activity Theories for Work Analysis and Design, and Affective Design.*

ASSISTIVE TECHNOLOGIES: CONCEPTS, METHODOLOGIES, TOOLS, AND APPLICATIONS

CONCEPTS, METHODOLOGIES, TOOLS, AND APPLICATIONS

IGI Global *Individuals with disabilities often have difficulty accomplishing tasks, living independently, and utilizing information technologies; simple aspects of daily life taken for granted by non-disabled individuals. Assistive Technologies: Concepts, Methodologies, Tools, and Applications presents a comprehensive collection of research, developments, and knowledge on technologies that enable disabled individuals to function effectively and accomplish otherwise impossible tasks. These volumes serve as a crucial reference source for experts in fields as diverse as healthcare, information science, education, engineering, and human-computer interaction, with applications bridging multiple disciplines.*

ADVANCES IN USABILITY, USER EXPERIENCE AND ASSISTIVE TECHNOLOGY

PROCEEDINGS OF THE AHFE 2018 INTERNATIONAL CONFERENCES ON USABILITY & USER EXPERIENCE AND HUMAN FACTORS AND ASSISTIVE TECHNOLOGY, HELD ON JULY 21–25, 2018, IN LOEWS SAPPHIRE FALLS RESORT AT UNIVERSAL STUDIOS, ORLANDO, FLORIDA, USA

Springer *This book focuses on emerging issues in usability, interface design, human–computer interaction, user experience and assistive technology. It highlights research aimed at understanding human interaction with products, services and systems, and focuses on finding effective approaches for improving user experience. It also discusses key issues in designing and providing assistive devices and services to individuals with disabilities or impairment, to assist mobility, communication, positioning, environmental control and daily living. The book covers modelling as well as innovative design concepts, with a special emphasis on user-centered design, and design for specific populations, particularly the elderly. Virtual reality, digital environments, heuristic evaluation and forms of device interface feedback of (e.g. visual and haptic) are also among the topics covered. Based on the AHFE 2018 Conference on Usability & User Experience and the AHFE 2018 Conference on Human Factors and Assistive Technology, held on July 21–25, 2018, in Orlando, Florida, USA, this book reports on cutting-edge findings, research methods and user-centred evaluation approaches.*

HANDBOOK OF RESEARCH ON INNOVATIONS IN THE DIAGNOSIS AND TREATMENT OF DEMENTIA

IGI Global *Technology is playing an increasing role in the lives of the elderly. One of the most prevalent developments for the aging population is the use of technological innovations for intervention and treatment of individuals with mental impairments. The Handbook of Research on Innovations in the Diagnosis and Treatment of*

Dementia offers empirical research and theoretical analyses on the cognitive impairment of the aging. Featuring studies in gerotechnology, this book is an essential resource for researchers, students, and practitioners in the field of geriatrics who are interested in the emerging research, clinical practices, therapy, and technological innovations concerning the development and treatment of dementia.

UNIVERSAL ACCESS IN HUMAN-COMPUTER INTERACTION. DESIGN APPROACHES AND SUPPORTING TECHNOLOGIES

14TH INTERNATIONAL CONFERENCE, UAHCI 2020, HELD AS PART OF THE 22ND HCI INTERNATIONAL CONFERENCE, HCII 2020, COPENHAGEN, DENMARK, JULY 19–24, 2020, PROCEEDINGS, PART I

Springer *This two-volume set of LNCS 12188 and 12189 constitutes the refereed proceedings of the 14th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2020, held as part of the 22nd International Conference, HCI International 2020, which took place in Copenhagen, Denmark, in July 2020. The conference was held virtually due to the COVID-19 pandemic. The total of 1439 papers and 238 posters have been accepted for publication in the HCII 2020 proceedings from a total of 6326 submissions. UAHCI 2020 includes a total of 80 regular papers which are organized in topical sections named: Design for All Theory, Methods and Practice; User Interfaces and Interaction Techniques for Universal Access; Web Accessibility; Virtual and Augmented Reality for Universal Access; Robots in Universal Access; Technologies for Autism Spectrum Disorders; Technologies for Deaf Users; Universal Access to Learning and Education; Social Media, Digital Services, eInclusion and Innovation; Intelligent Assistive Environments.*

ADVANCES IN USABILITY, USER EXPERIENCE, WEARABLE AND ASSISTIVE TECHNOLOGY

PROCEEDINGS OF THE AHFE 2021 VIRTUAL CONFERENCES ON USABILITY AND USER EXPERIENCE, HUMAN FACTORS AND WEARABLE TECHNOLOGIES, HUMAN FACTORS IN VIRTUAL ENVIRONMENTS AND GAME DESIGN, AND HUMAN FACTORS AND ASSISTIVE TECHNOLOGY, JULY 25-29, 2021, USA

Springer Nature *This book addresses emerging issues in usability, interface design, human–computer interaction, user experience and assistive technology. It highlights research aimed at understanding human interactions with products, services and systems and focuses on finding effective approaches for improving the user experience. It also discusses key issues in designing and providing assistive devices and services for individuals with disabilities or impairment, offering them support with mobility, communication, positioning, environmental control and daily living. The book covers modeling as well as innovative design concepts, with a special emphasis on user-centered design, and design for specific populations, particularly the elderly. Further topics include virtual reality, digital environments, gaming,*

heuristic evaluation and forms of device interface feedback (e.g. visual and haptic). Based on the AHFE 2021 Conferences on Usability and User Experience, Human Factors and Wearable Technologies, Human Factors in Virtual Environments and Game Design, and Human Factors and Assistive Technology, held virtually on 25–29 July, 2021, from USA, this book provides academics and professionals with an extensive source of information and a timely guide to tools, applications and future challenges in these fields.

COOK & HUSSEY'S ASSISTIVE TECHNOLOGIES

Elsevier Health Sciences *It's here: the latest edition of the one text you need to master assistive strategies, make confident clinical decisions, and help improve the quality of life for people with disabilities. Based on the Human Activity Assistive Technology (HAAT) model, Assistive Technologies: Principles and Practice, 4th Edition provides detailed coverage of the broad range of devices, services, and practices that comprise assistive technology, and focuses on the relationship between the human user and the assisted activity within specific contexts. Updated and expanded, this new edition features coverage of new ethical issues, more explicit applications of the HAAT model, and a variety of global issues highlighting technology applications and service delivery in developing countries. Human Activity Assistive Technology (HAAT) framework demonstrates assistive technology within common, everyday contexts for more relevant application. Focus on clinical application guides you in applying concepts to real-world situations. Review questions and chapter summaries in each chapter help you assess your understanding and identify areas where more study is needed. Content on the impact of AT on children and the role of AT in play and education for children with disabilities demonstrates how AT can be used for early intervention and to enhance development. Coverage of changing AT needs throughout the lifespan emphasizes how AT fits into people's lives and contributes to their full participation in society. Principles and practice of assistive technology provides the foundation for effective decision-making. NEW! Global issues content broadens the focus of application beyond North America to include technology applications and service delivery in developing countries. NEW! Ethical issues and occupational justice content exposes you to vital information as you start interacting with clients. NEW! More case studies added throughout the text foster an understanding of how assistive technologies are used and how they function. NEW! Updated content reflects current technology and helps keep you current. NEW! Explicit applications of the HAAT model in each of the chapters on specific technologies and more emphasis on the interactions among the elements make content even easier to understand.*

OVER THE HORIZON

POTENTIAL IMPACT OF EMERGING TRENDS IN INFORMATION AND COMMUNICATION TECHNOLOGY ON DISABILITY POLICY AND PRACTICE

This policy paper explores key trends in information and communication technology,

highlights the potential opportunities and problems these trends present for people with disabilities, and suggests some strategies to maximize opportunities and avoid potential problems and barriers. Specifically, this paper discusses technology trends that present opportunities for universally designed products, and for improved availability, usability, and affordability of assistive technology that can have significant impact on quality of life for people with disabilities. The first trend discussed is the ever-increasing computational power plus the decreasing size and cost of technology--resulting in technology that is more portable, affordable, and for which it is easier to build in access. Second, advances in interface technology are creating new opportunities for better assistive technologies, more accessible mainstream technologies, and entirely new ways for users to control both. Third, new advances will soon enable people to be connected to communication and information networks, at any time, wherever they are--making real time assistance only a button press or voice command away. Finally, the proliferation of virtual places via the World Wide Web is changing the way we approach communications, education, work, and commerce, increasing access to goods and services without the need to leave home. Seven general action items are advanced and discussed: (1) Maximize the effectiveness of assistive technologies and lower their cost--in order to maximize people's general abilities and independence. Key strategies: Foster results-oriented R & D all the way to commercial availability; (2) Maximize the accessibility of mainstream information and communication technology products, so that people with disabilities and seniors can use standard products as they encounter them. Key strategies: Increase funding for research, proof of concept, and commercial hardening of approaches to accessible design of mainstream products to advance understanding in this area; craft accessibility regulations so as to help employees build business cases; (3) Ensure that access to the Internet and other virtual environments is provided, as it has been to physical places of public accommodation; (4) Address new barriers to the accessibility of digital media caused by digital rights management (DRM), including when visual and audio rights are sold separately; (5) Base all policy regarding information and communication technology (ICT) accessibility on a realization of the importance of the business case. Where a solid business case cannot be built based on market forces alone, create accessibility regulations and effective enforcement mechanisms that provide a clear profit advantage to those who comply and a disadvantage to those who do not; (6) Create accessibility laws and regulations that are not technology specific, but are based on the functions of a device. Provide clear guidance as to what is sufficient to meet the standard, and allow requirements to index themselves to technologies, as they evolve, using baselines. To the extent possible, harmonize laws and regulations with those of other countries for products that are sold internationally; and (7) Ensure that up-to-date information about accessible mainstream technology (AMT) and assistive technology (AT) is available to and being used by the public.

ARTIFICIAL INTELLIGENCE: CONCEPTS, METHODOLOGIES, TOOLS, AND APPLICATIONS

CONCEPTS, METHODOLOGIES, TOOLS, AND APPLICATIONS

IGI Global *Ongoing advancements in modern technology have led to significant developments in artificial intelligence. With the numerous applications available, it becomes imperative to conduct research and make further progress in this field. Artificial Intelligence: Concepts, Methodologies, Tools, and Applications provides a comprehensive overview of the latest breakthroughs and recent progress in artificial intelligence. Highlighting relevant technologies, uses, and techniques across various industries and settings, this publication is a pivotal reference source for researchers, professionals, academics, upper-level students, and practitioners interested in emerging perspectives in the field of artificial intelligence.*

SMART ENVIRONMENTS

TECHNOLOGY, PROTOCOLS AND APPLICATIONS

John Wiley & Sons *Smart Environments contains contributions from leading researchers, describing techniques and issues related to developing and living in intelligent environments. Reflecting the multidisciplinary nature of the design of smart environments, the topics covered include the latest research in smart environment philosophical and computational architecture considerations, network protocols for smart environments, intelligent sensor networks and powerline control of devices, and action prediction and identification.*

HANDBOOK OF INTELLECTUAL PROPERTY RESEARCH

LENSES, METHODS, AND PERSPECTIVES

Oxford University Press "*The relevance of intellectual property (IP) law has increased dramatically over the last several years. Globalization, digitization, and the rise of post-industrial information-based industries have all contributed to a new prominence of IP law as one of the most important factors in driving innovation and economic development. At the same time, the significant expansion of IP rules has impacted many areas of public policy such as public health, the environment, biodiversity, agriculture, information, in an unprecedented manner. The growing importance of IP law has led to an exponential growth of academic research in this area. This Book offers a comprehensive overview of the methods and approaches that can be used to address and develop scholarly research questions related to IP law. In particular, this Book aims to provide a useful resource that can be used by IP scholars who are interested in expanding their expertise in a specific research method or seek to acquire an understanding of alternative lenses that could be applied to their research. Even though this Book does not claim to include all existing research methodologies, it represents one of the largest and most diverse compilations, which has been carried out to date. In addition, the authors of this Book comprise an equally diverse group of scholars from different jurisdictions, backgrounds, and legal traditions. This diversity, both regarding the topics and the authors, is a fundamental feature of the Book, which seeks to assist IP scholars worldwide in their research journeys.*" --

ASSISTIVE TECHNOLOGIES AND COMPUTER ACCESS FOR MOTOR DISABILITIES

IGI Global *Individuals with disabilities that impede their range of motion often have difficulty accessing technologies. With the use of computer-based assistive technology; devices, tools, and services can be used to maintain and improve the functional capabilities of motor disabilities. Assistive Technologies and Computer Access for Motor Disabilities investigates solutions to the difficulties of impaired technology access by highlighting the principles, methods, and advanced technological solutions for those with motor impairments. This reference source is beneficial to academia, industry, and various professionals in disciplines such as rehabilitation science, occupational therapy, human-computer interface development, ergonomics, and teaching in inclusive and special education. This publication is integrated with its pair book Disability Informatics and Web Accessibility for Motor Limitations.*

ASSISTIVE TECHNOLOGY

BUILDING BRIDGES

IOS Press *Assistive Technology (AT) is the term used to describe products or technology-based services which support those with disabilities or other limitations to their daily activities, enabling them to enjoy a better quality of life. This book presents the proceedings of the 13th European Conference on the Advancement of Assistive Technology (AAATE 2015), held in Budapest, Hungary in September 2015. This biennial conference has established itself as a leading forum in the transdisciplinary area of Assistive Technology, providing a unique platform for the gathering of experts from around the world to review progress and challenges in the interdisciplinary fields which contribute to AT, such as research, development, manufacturing, supply, provision and policy. The theme of the 2015 conference is 'Attracting new areas and building bridges', and this book contains 138 reviewed papers and 28 poster presentations delivered at the conference, covering AT themes as diverse as aging, blindness, mobility, assisted living and accessibility for people with dementia and cognitive impairment. Offering a current overview of many aspects of AT, this book will be of interest to all those – from researchers and manufacturers to healthcare professionals and end-users – whose work or daily life involves the relationship between technology and disability.*

ASSISTIVE TECHNOLOGIES FOR ASSESSMENT AND RECOVERY OF NEUROLOGICAL IMPAIRMENTS

IGI Global *People with neurological disorders may experience significant problems, isolation, detachment, and passivity while dealing with environmental requests. They constantly rely on caregivers and family assistance, which can create negative outcomes on their quality of life. An emerging way to overcome these issues is assistive technology-based interventions (AT). AT-based programs are designed to fill the gap between human/individual capacities or skills and environmental requests. These technologies can also bring about independence and self-*

determination and provide people with neurological disorders an active role, positive participation, and an enhanced status in being able to achieve functional daily activities by reducing the roles of their families and caregivers. The positive impacts of this technology are an important area of research, and its usage for neurological disorders is critical for the assessment and recovery of patients. Assistive Technologies for Assessment and Recovery of Neurological Impairments explores the use of AT-based programs for promoting independence and self-determination of individuals with neurological disorders. The chapters discuss AT-based interventions in detail with the specific technologies that are being used, the positive effects on patients, and evidence-based practices. This book also focuses on specific technologies such as virtual reality (VR) setups and augmented reality (AR) as valid ecological environments for patients that ensure methodological control and behavioral tracking for both assessment and rehabilitation purposes. This book is essential for occupational therapists, speech therapists, physiotherapists, neurologists, caregivers, psychologists, practitioners, medical professionals, medical technologists, IT consultants, academicians, and students interested in assistive technology interventions for people with neurological impairments.

ASSISTIVE TECHNOLOGIES FOR PHYSICAL AND COGNITIVE DISABILITIES

IGI Global *Research on assistive technologies is undergoing many developments in its effectiveness in helping those with varying impairments. New technologies are constantly being created, researched, and implemented for those who need these technological aides in daily life. Assistive Technologies for Physical and Cognitive Disabilities combines worldwide cases on people with physical and cognitive disabilities with the latest applications in assistive technologies. This reference work brings different researchers together under one title to discuss current findings, developments, and ongoing research in the area of rehabilitative technology. This reference book is of critical use to professionals, researchers, healthcare practitioners, caretakers, academicians, and students.*

2014 IEEE SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE IN ROBOTIC REHABILITATION AND ASSISTIVE TECHNOLOGIES (CIR2AT)

Millions of individuals experience impaired mobility usually accompanied by limited to no manual dexterity The cost associated with these disabilities includes not only those incurred through medical and support services, but also less tangible costs, such as those due lost wages and non productivity The goals of rehabilitation are to ameliorate life limiting disabilities and facilitate community re entry While restoration of function is the most positive outcome of rehabilitation, compensatory strategies are also employed when natural function cannot be restored A particularly promising approach is the use of assistive technologies to extend an individual s functionality and substitute for compromised functions This symposium will highlight the latest results from world leading research labs and industry in the field of robotic rehabilitation and assistive technologies

ASSISTIVE TECHNOLOGY AND ARTIFICIAL INTELLIGENCE

APPLICATIONS IN ROBOTICS, USER INTERFACES AND NATURAL LANGUAGE PROCESSING

Springer Science & Business Media *This book constitutes a carefully arranged selection of revised papers on assistive technology, first presented at related AAAI workshops between 1995 and 1998. The book is devoted to the advancement and use of AI stimulated technology that can help users extend their current range of cognitive and sensory abilities or overcome their motor disabilities. Among various issues in the interdisciplinary area of assistive technology, the papers address topics from natural language processing, planning, robotics, user interface design, computer vision, and learning.*

ASSISTIVE TECHNOLOGY DESIGN FOR INTELLIGENCE AUGMENTATION

Springer Nature *Assistive Technology Design for Intelligence Augmentation presents a series of frameworks, perspectives, and design guidelines drawn from disciplines spanning urban design, artificial intelligence, sociology, and new forms of collaborative work, as well as the author's experience in designing systems for people with cognitive disabilities. Many of the topics explored came from the author's graduate studies at the Center for LifeLong Learning and Design, part of the Department of Computer Science and the Institute of Cognitive Science at the University of Colorado, Boulder. The members of the Center for LifeLong Learning and Design came from a wide range of design perspectives including computer science, molecular biology, journalism, architecture, assistive technology (AT), urban design, sociology, and psychology. The main emphasis of this book is to provide leverage for understanding the problems that the AT designer faces rather than facilitating the design process itself. Looking at the designer's task with these lenses often changes the nature of the problem to be solved. The main body of this book consists of a series of short chapters describing a particular approach, its applicability and relevance to design for intelligence augmentation in complex computationally supported systems, and examples in research and the marketplace. The final part of the book consists of listing source documents for each of the topics and a reading list for further exploration. This book provides an introduction to perspectives and frameworks that are not commonly taught in presentations of AT design which may also provide valuable design insights to general human-computer interaction and computer-supported cooperative work researchers and practitioners.*

GENEDIS 2018

COMPUTATIONAL BIOLOGY AND BIOINFORMATICS

Springer Nature *The 3rd World Congress on Genetics, Geriatrics, and Neurodegenerative Disease Research (GeNeDis 2018), focuses on recent advances in genetics, geriatrics, and neurodegeneration, ranging from basic science to clinical and pharmaceutical developments. It also provides an international forum for the latest scientific discoveries, medical practices, and care initiatives. Advanced*

information technologies are discussed, including the basic research, implementation of medico-social policies, and the European and global issues in the funding of long-term care for elderly people.

ADVANCEMENT OF ASSISTIVE TECHNOLOGY

IOS Press *People go traveling for two reasons: because they are searching for something, or they are running from something. Katie's world is shattered by the news that her headstrong and bohemian younger sister, Mia, has been found dead at the bottom of a cliff in Bali. The authorities say that Mia jumped—that her death was a suicide. Although they'd hardly spoken to each other since Mia suddenly left on an around-the-world trip six months earlier, Katie refuses to accept that her sister would have taken her own life. Distraught that they never made peace, Katie leaves her orderly, sheltered life in London behind and embarks on a journey to find out the truth. With only the entries in Mia's travel journal as her guide, Katie retraces the last few months of her sister's life and—page by page, country by country—begins to uncover the mystery surrounding her death. . . . Weaving together the exotic settings and suspenseful twists of Alex Garland'sThe Beachwith a powerful tale of familial love in the spirit of Rosamund Lupton'sSister, Swimming at Nightis a fast-paced, accomplished, and gripping debut novel of secrets, loss, and forgiveness.*