

Kinect User Interface Guidelines

This book constitutes the revised, selected and extended papers of the 5th International Conference on Communication Technologies for Ageing Well and e-Health, ICT4AWE 2019, held in Heraklion, Crete, Greece in May 2019. The 9 full papers presented were carefully reviewed and selected from 52 submissions. The papers aim at contributing to the understanding of relevant trends of current research on ICT for Ageing Well and eHealth including the ambient assisted living.

Die Interaktionsgestaltung bewegt sich in einem Spannungsfeld zwischen Konventionen und Innovationen. Die Vertrautheit konventioneller Bedienkonzepte steht im scheinbaren Widerspruch zur teils radikalen Neuartigkeit innovativer Ansätze. Aufbauend auf Diskursen und Betrachtungen unterschiedlicher wissenschaftlicher Disziplinen (wie der Technikoziologie, der Innovationsforschung oder der Kommunikationstheorie) erarbeitet Marcel Münchow ein designwissenschaftliches Theoriegebilde zur Deutung dieser bidirektionalen Wechselwirkungen zwischen Konventionen und Innovationen im Kontext der Mensch-Maschine-Interaktion.

Human Computer Interaction (HCI) is easy to define yet difficult to predict. Encompassing the management, study, planning, and design of the ways in which users interact with computers, this field has evolved from using punch cards to force touch in a matter of decades. What was once considered science fiction is now ubiquitous. The future of HCI is mercurial, yet predictions point to the effortless use of high-functioning services. The Handbook of Research on Human-Computer Interfaces, Developments, and Applications is primarily concerned with emerging research regarding gesture interaction, augmented reality, and assistive technologies and their place within HCI. From gaming to rehabilitation systems, these new technologies share the need to interface with humans, and as computers become thoroughly integrated into everyday life, so does the necessity of HCI research. This handbook of research benefits the research needs of programmers, developers, students and educators in computer science, and researchers.

The four-volume set LNCS 6765-6768 constitutes the refereed proceedings of the 6th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2011, held as Part of HCI International 2011, in Orlando, FL, USA, in July 2011, jointly with 10 other conferences addressing the latest research and development efforts and highlighting the human aspects of design and use of computing systems. The 70 revised papers included in the second volume were carefully reviewed and selected from numerous submissions. The papers are organized in the following topical sections: user models, personas and virtual humans; older people in the information society; designing for users diversity; cultural and emotional aspects; and eye tracking, gestures and brain interfaces.

Handbook of Research on Advanced Intelligent Control Engineering and Automation

Ambient Assisted Living and Daily Activities

Proceedings of the 3rd International Conference on Intelligent Technologies and Engineering Systems (ICITES2014)

11th International Conference, UAHCI 2017, Held as Part of HCI International 2017, Vancouver, BC, Canada, July 9 – 14, 2017, Proceedings, Part II

20th International Conference, CRIWIG 2014, Santiago, Chile, September 7-10, 2014, Proceedings

Create Usable Interfaces for Applications and the Web

Games for Health 2014

Breakthroughs in Research and Practice

During the last decade, cell phones with multimodal interfaces based on combined new media have become the dominant computer interface worldwide. Multimodal interfaces support mobility and expand the expressive power of human input to computers. They have shifted the fulcrum of human-computer interaction much closer to the human. This book explains the foundation of human-centered multimodal interaction and interface design, based on the cognitive and neurosciences, as well as the major benefits of multimodal interfaces for human cognition and performance. It describes the data-intensive methodologies used to envision, prototype, and evaluate new multimodal interfaces. From a system development viewpoint, this book outlines major approaches for multimodal signal processing, fusion, architectures, and techniques for robustly interpreting users' meaning. Multimodal interfaces have been commercialized extensively for field and mobile applications during the last decade. Research also is growing rapidly in areas like multimodal data analytics, affect recognition, accessible interfaces, embedded and robotic interfaces, machine learning and new hybrid processing approaches, and similar topics. The expansion of multimodal interfaces is part of the long-term evolution of more expressively powerful input to computers, a trend that will substantially improve support for human cognition and performance.

User experience design is the discipline of creating a useful and usable Web site or application that's easily navigated and meets the needs of the site owner and its users. There's a lot more to successful UX design than knowing the latest Web technologies or design trends: It takes diplomacy, management skills, and business savvy. That's where the updated edition of this important book comes in. With new information on design principles, mobile and gestural interactions, content strategy, remote research tools and more, you'll learn to: Recognize the various roles in UX design, identify stakeholders, and enlist their support Obtain consensus from your team on project objectives Understand approaches such as Waterfall, Agile, and Lean UX Define the scope of your project and avoid mission creep Conduct user research in person or remotely, and document your findings Understand and communicate user behavior with personas Design and prototype your application or site Plan for development, product rollout, and ongoing quality assurance

A comprehensive guide to UI design, providing key features and functional requirements, best practices and design guidelines, and components of the user experience of the application, illustrated with "live" case study examples.

This book constitutes the proceedings of the 4th International Conference on Human Aspects of IT for the Aged Population, ITAP 2018, held as part of the 20th International Conference, HCI International 2018, which took place in Las Vegas, Nevada, in July 2018. The total of 1171 papers and 160 posters included in the 30 HCII 2018 proceedings volumes was carefully reviewed and selected from 4346 submissions. ITAP 2018 includes a total of 84 papers. They were organized in topical sections as follows: Part I: aging and technology acceptance; aging and interaction; intergenerational communication and social participation. Part II: health care technologies and services for the elderly; intelligent environments for aging; and games and entertainment for the elderly.

Digital Design Essentials

Addressing Global Challenges and Quality Education

Distributed, Ambient, and Pervasive Interactions

6th International Conference on Well-Being in the Information Society, WIS 2016, Tampere, Finland, September 16-18, 2016, Proceedings

User Interface Design Considerations for Emerging Input Technologies in ITV

Beginning Microsoft Kinect for Windows SDK 2.0

15th European Conference on Technology Enhanced Learning, EC-TEL 2020, Heidelberg, Germany, September 14–18, 2020, Proceedings

Smart Homes and Health Telematics

This book constitutes the refereed proceedings of the 6th International Conference on Well-Being in the Information Society, WIS 2016, held in Tampere, Finland, in September 2016. The 21 revised full papers presented were carefully reviewed and selected from 42 submissions. With the core topic "Building Sustainable Health Ecosystems" WIS 2016 focused on innovations and fresh ideas in the cross-section of urban living, information society and health as understood in a wide sense. The papers presented in this volume are organized along the following seven broad topics: 1. Macro level considerations of e-health and welfare, 2. Welfare issues of children, youth, young elderly and seniors, 3. Analytics issues of eHealth and welfare, 4. National/regional initiatives in eHealth and welfare, and 5. Specific topics of eHealth. The papers in these topics span qualitative and quantitative analysis, empirical surveys, case studies as well as conceptual work.

This open access book constitutes the refereed proceedings of the First International Conference on VR Technologies in Cultural Heritage, VRTCH 2018, held in Brasov, Romania in May 2018. The 13 revised full papers along with the 5 short papers presented were carefully reviewed and selected from 21 submissions. The papers of this volume are organized in topical sections on data acquisition and modelling, visualization methods / audio, sensors and actuators, data management, restoration and digitization, cultural tourism.

Brave NUI World is the first practical guide for designing touch- and gesture-based user interfaces. Written by the team from Microsoft that developed the multi-touch, multi-user Surface® tabletop product, it introduces the reader to natural user interfaces (NUI). It gives readers the necessary tools and information to integrate touch and gesture practices into daily work, presenting scenarios, problem solving, metaphors, and techniques intended to avoid making mistakes. This book considers diverse user needs and context, real world successes and failures, and the future of NUI. It presents thirty scenarios, giving practitioners a multitude of considerations for making informed design decisions and helping to ensure that missteps are never made again. The book will be of value to game designers as well as practitioners, researchers, and students interested in learning about user experience design, user interface design, interaction design, software design, human computer interaction, human factors, information design, and information architecture. Provides easy-to-apply design guidance for the unique challenge of creating touch- and gesture-based user interfaces Considers diverse user needs and context, real world successes and failures, and a look into the future of NUI Presents thirty scenarios, giving practitioners a multitude of considerations for making informed design decisions and helping to ensure that missteps are never made again

This book constitutes the proceedings of the 20th Collaboration Researchers' International Working Group Conference on Collaboration and Technology, held in Santiago, Chile, in September 2014. The 16 revised papers presented together with 18 progress papers and 3 invited talks were carefully reviewed and selected from 49 submissions. The papers published in proceedings of this year's and past CRIWIG conferences reflect the trends in collaborative computing research and its evolution. There was a growing interest in social networks analysis, crowdsourcing and computer support for large communities in general. A special research topic which has been traditionally present in the CRIWIG proceedings has been collaborative learning.

Universal Access in Human-Computer Interaction. Users Diversity

For user experience designers in the field or in the making

5th International Conference, ICT4AWE 2019, Heraklion, Crete, Greece, May 2–4, 2019, Revised Selected Papers

Human Aspects of IT for the Aged Population. Applications in Health, Assistance, and Entertainment

Health Literacy: Breakthroughs in Research and Practice

6th International Conference, UAHCI 2011, Held as Part of HCI International 2011, Orlando, FL, USA, July 9-14, 2011, Proceedings

Intelligent Virtual Agents

Building Sustainable Health Ecosystems

This book investigates a new interactive data visualisation concept that employs traditional Chinese aesthetics as a basis for exploring contemporary digital technological contexts. It outlines the aesthetic approach, which draws on non-Western aesthetic concepts, specifically the Yijing and Taoist cosmological principles, and discusses the development of data-based digital practices within a theoretical framework that combines traditional Taoist ideas with the digital humanities. The book also offers a critique of the Western aesthetics underpinning data visualisation, in particular the Kantian sublime, which prioritises the experience of power over the natural world viewed at a distance. Taoist philosophy, in contrast, highlights the integration of the surface of the body and the surface of nature as a Taoist body, rather than promoting an opposition of mind and body. The book then explores the transformational potential between the human body and technology, particularly in creating an aesthetic approach spanning traditional Chinese aesthetics and gesture-based technology. Representing a valuable contribution to the digital humanities, the book helps readers understand data-based artistic practices, while also bringing the ideas of traditional Chinese aesthetics to Western audiences. In addition, it will be of interest to practitioners in the fields of digital art and data visualisation seeking new models.

In this new era of computing, where the iPhone, iPad, Xbox Kinect, and similar devices have changed the way to interact with computers, many questions have risen about how modern input devices can be used for a more intuitive user interaction. Interaction Design for 3D User Interfaces: The World of Modern Input Devices for Research, Applications, a

"Fundamentally, making games is designing with others, everyone contributing from different angles towards the best possible product. Conclusively, Garcia-Ruiz has chosen a collection of chapters that demonstrates several different aspects of working in gaming and working with others that stands to raise the level of expertise in the field." —Veronica Zammitto, Senior Lead Games User Research, Electronic Arts, Inc., from the Foreword Usability is about making a product easy to use while meeting the requirements of target users. Applied to video games, this means making the game accessible and enjoyable to the player. Video games with high usability are generally played efficiently and frequently while enjoying higher sales volumes. The case studies in this book present the latest interdisciplinary research and applications of games user research in determining and developing usability to improve the video game user experience at the human-computer interface level. Some of the areas examined include practical and ethical concerns in conducting usability testing with children, audio experiences in games, tangible and graphical game interfaces, controller testing, and business models in mobile gaming. Games User Research: A Case Study Approach provides a highly useful resource for researchers, practitioners, lecturers, and students in developing and applying methods for testing player usability as well as for conducting games user research. It gives the necessary theoretical and practical background for designing and conducting a test for usability with an eye toward modifying software interfaces to improve human-computer interaction between the player and the game.

This book includes the original, peer reviewed research from the 3rd International Conference on Intelligent Technologies and Engineering Systems (ICITES2014), held in December, 2014 at Cheng Shiu University in Kaohsiung, Taiwan. Topics covered include: Automation and robotics, fiber optics and laser technologies, network and communication systems, micro and nano technologies and solar and power systems. This book also Explores emerging technologies and their application in a broad range of engineering disciplines Examines fiber optics and laser technologies Covers biomedical, electrical, industrial and mechanical systems Discusses multimedia systems and applications, computer vision and image & video signal processing

VR Technologies in Cultural Heritage

Second International Conference, DAPI 2014, Held as Part of HCI International 2014, Heraklion, Crete, Greece, June 22-27, 2014, Proceedings

Technology Trends

First International Conference, VRTCH 2018, Brasov, Romania, May 29-30, 2018, Revised Selected Papers

4th International Conference, CITT 2018, Babahoyo, Ecuador, August 29-31, 2018, Revised Selected Papers

Proceedings of the 4th conference on gaming and playful interaction in healthcare

Second International Conference, DUXU 2013, Held as Part of HCI International 2013, Las Vegas, NV, USA, July 21-26, 2013, Proceedings, Part III

Advances in Human Factors and Systems Interaction

This book constitutes the refereed proceedings of the 9th International Conference on Intelligent Technologies for Interactive Entertainment, INTETAIN 2017, held in Funchal, Portugal, in June 2017. The 15 full papers were selected from 19 submissions and present developments and insights in art, design, science and engineering regarding novel entertainment-focused devices, paradigms, and reconfiguration of entertainment experiences. In industrial engineering and manufacturing, control of individual processes and systems is crucial to developing a quality final product. Rapid developments in technology are pioneering new techniques of research in control and automation with multi-disciplinary applications in electrical, electronic, chemical, mechanical, aerospace, and instrumentation engineering. The Handbook of Research on Advanced Intelligent Control Engineering and Automation presents the latest research into intelligent control technologies with the goal of advancing knowledge and applications in various domains. This text will serve as a reference book for scientists, engineers, and researchers, as it features many applications of new computational and mathematical tools for solving complicated problems of mathematical modeling, simulation, and control.

This book constitutes the refereed proceedings of the 4th International Conference on Technology Trends, CITT 2018, held in Babahoyo, Ecuador, in August 2018. The 53 revised full papers presented were carefully reviewed and selected from 204 submissions. The papers are organized in topical sections on communications; security and privacy; computer and software engineering; computational intelligence; e-government and e-participation.

This book reports on research findings and practical lessons featuring advances in the areas of digital and interaction design, graphic design and branding, design education, society and communication in design practice, and related ones. Gathering the proceedings of the 5th International Conference on Digital Design and Communication, Digicom 2021, held on November 4–6, 2021, in Barcelos, Portugal, and continuing the tradition of the previous book, it describes new design strategies and solutions to foster digital communication within and between the society, institutions and brands. By highlighting innovative ideas and reporting on multidisciplinary projects, it offers a source of inspiration for designers of all kinds, including graphic and web designers, UI, UX and social media designers, and to researchers, advertisers, artists, and brand and corporate communication managers alike.

HCI International 2013 - Posters' Extended Abstracts

Games User Research

Proceedings of the 5th International Confence on Design and Digital Communication, Digicom 2021, November 4–6, 2021, Barcelos, Portugal

Information and Communication Technologies for Ageing Well and e-Health

Optimizing Assistive Technologies for Aging Populations

Collaboration and Technology

Interaktionswelten

Handbook of Research on Human-Computer Interfaces, Developments, and Applications

The development of better processes to relay medical information has enhanced the healthcare field. By implementing effective collaborative strategies, this ensures proper quality and instruction for both the patient and medical practitioners. Health Literacy: Breakthroughs in Research and Practice examines the latest advances in providing and helping patients and medical professionals to understand basic health information and the services that are most appropriate. Including innovative studies on interactive health information, health communication, and health education, this multi-volume book is an ideal source for professionals, researchers, academics, practitioners, and students interested in the improvement of health literacy.

This book constitutes the refereed proceedings of the 5th International Workshop on Learning Technology for Education in Cloud, LTEC 2016, held in Hagen, Germany, in July 2016. The 25 revised full papers presented were carefully reviewed and selected from 51 submissions. The papers are organized in topical sections on learning technologies; learning tools and environment; MOOC for learning; problem solving and knowledge transfer; case study.

This is the first of a two-volume set (CCIS 373 and CCIS 374) that constitutes the extended abstracts of the posters presented during the 15th International Conference on Human-Computer Interaction, HCII 2013, held in Las Vegas, USA, in July 2013, jointly with 12 other thematically similar conferences. The total of 1666 papers and 303 posters presented at the HCII 2013 conferences was carefully reviewed and selected from 5210 submissions. These papers address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The papers accepted for presentation 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 extended abstracts were carefully reviewed and selected for inclusion in this two-volume set. The papers included in this volume are organized in the following topical sections: HCI design approaches, methods and techniques; usability methods, techniques and studies; universal access and inclusion; multimodal and ambient interaction; cognitive and psychological aspects of interaction; perception and interaction; ergonomic and human modelling issues; capturing gaze, biosignals and brainwaves; development environments; product design, marketing and advertisement.

Create rich experiences for users of Windows 7 and Windows 8 Developer Preview with this pragmatic guide to the Kinect for Windows Software Development Kit (SDK). The author, a developer evangelist for Microsoft, walks you through Kinect sensor technology and the SDK—providing hands-on insights for how to add gesture and posture recognition to your apps. If you're skilled in C# and Windows Presentation Foundation, you'll learn how to integrate Kinect in your applications and begin writing Uis and controls that can handle Kinect interaction. This book introduces the Kinect for Windows Software Development Kit to developers looking to enrich applications they build for Windows 7 and later with human motion tracking Teaches developers with core C# and WPF skills how to program gesture and posture recognition in Kinect Describes how to integrate 3D representation on top of a real scene Provides expert insights and code samples to get you up and running

Programming with the Kinect for Windows Software Development Kit

Gestaltungswissenschaftliche Perspektiven auf Innovationen und Konventionen in der Mensch-Maschine-Interaktion

Design, User Experience, and Usability: User Experience in Novel Technological Environments Virtual and Augmented Reality methods in Neuroscience and Neuropathology**Brave NUI World****9th International Conference, INTETAIN 2017, Funchal, Portugal, June 20-22, 2017, Proceedings Designed for Use****4th International Conference, SGDA 2013, Trondheim, Norway, September 25-27, 2013, Proceedings**

This book is for designers, developers, and product managers who are charged with what sometimes seems like an impossible task: making sure products work the way your users expect them to. You'll find out how to design applications and websites that people will not only use, but will absolutely love. The second edition brings the book up to date and expands it with three completely new chapters.

Interaction design - the way the apps on our phones work, the way we enter a destination into our car's GPS - is becoming more and more important. Identify and fix bad software design by making usability the cornerstone of your design process. Lukas weaves together hands-on techniques and fundamental concepts. Each technique chapter explains a specific approach you can use to make your product more user friendly, such as storyboarding, usability tests, and paper prototyping. Idea chapters are concept-based: how to write usable text, how realistic your designs should look, when to use animations. This new edition is updated and expanded with new chapters covering requirements gathering, how the design of data structures influences the user interface, and how to do design work as a team. Through copious illustrations and supporting psychological research, expert developer and user interface designer Lukas Mathis gives you a deep dive into research, design, and implementation--the essential stages in designing usable interfaces for applications and websites. Lukas inspires you to look at design in a whole new way, explaining exactly what to look for - and what to avoid - in creating products that get people excited.

This book reports on cutting-edge research into innovative system interfaces, highlighting both lifecycle development and human-technology interaction, especially in virtual, augmented and mixed-reality systems. It describes advanced methodologies and tools for evaluating and improving interface usability and discusses new models, as well as case studies and good practices. The book addresses the human, hardware, and software factors in the process of developing interfaces for optimizing total system performance, particularly innovative computing technologies for teams dealing with dynamic environments, while minimizing total ownership costs. It also highlights the forces currently shaping the nature of computing and systems, including the need for decreasing hardware costs: the importance of portability, which translates to the modern tendency toward hardware miniaturization and technologies for reducing power requirements; the necessity of a better assimilation of computation in the environment; and social concerns regarding access to computers and systems for people with special needs. The book, which is based on the AHFE 2018 International Conference on Human Factors and Systems Interaction, held on July 21–25, 2018, in Orlando, Florida, USA, offers a timely survey and practice-oriented guide for systems interface users and developers alike.

The four-volume set LNCS 8012, 8013, 8014 and 8015 constitutes the proceedings of the Second International Conference on Design, User Experience, and Usability, DUXU 2013, held as part of the 15th International Conference on Human-Computer Interaction, HCII 2013, held in Las Vegas, USA in July 2013, jointly with 12 other thematically similar conferences. The total of 1666 papers and 303 posters presented at the HCII 2013 conferences was carefully reviewed and selected from 5210 submissions. These papers address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The papers accepted for presentation 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 282 contributions included in the DUXU 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: designing for safe and secure environments; designing for smart and ambient devices; designing for virtual and augmented environments; and emotional and persuasion design.

This book constitutes the thoroughly refereed post-conference proceedings of the 12th International Conference on Smart Homes and Health Telematics, ICOST 2014, held in Denver, CO, USA in June 2014. The 21 revised full papers presented together with three keynote papers and 9 short papers were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on Design and Usability, assistive and sentient environments, cognitive technology, activity recognition, context and situation awareness, Health IT and short contributions.

The World of Modern Input Devices for Research, Applications, and Game Development

Human Aspects of IT for the Aged Population. Design for Everyday Life

Serious Games Development and Applications

International Conference, HCI International 2013, Las Vegas, NV, USA, July 21–26, 2013, Proceedings, Part I

Intelligent Technologies for Interactive Entertainment

Advances in Design and Digital Communication II

A Project Guide to UX Design

6th International Work-Conference, IWAAL 2014, Belfast, UK, December 2-5, 2014, Proceedings

Demographics reveal that the proportion of elderly individuals in the population is growing at a significant rate. Advances in medicine have allowed populations to live longer than ever; however, ensuring that these individuals have the tools necessary to sustain a productive and happy lifestyle as they age remains a concern. Optimizing Assistive Technologies for Aging Populations focuses on the development and improvement of devices intended to assist elderly individuals in coping with various physical limitations and disabilities. Highlighting the available tools and technologies for supporting the mobility, agility, and self-sufficiency of the aging population as well as the challenges associated with the integration of these technologies into the everyday lives of elderly individuals, this publication is ideally designed for reference use by healthcare workers, medical students, gerontologists, and IT developers in the field of medicine.

This book constitutes the refereed proceedings of the Second International Conference on Distributed, Ambient, and Pervasive Interactions, DAPI 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 13 other thematically 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 accepted for presentation 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 58 papers included in this volume are organized in topical sections on design frameworks and models for intelligent interactive environments; natural interaction; cognitive, perceptual and emotional issues in ambient intelligence; user experience in intelligent environments; developing distributed, pervasive and intelligent environments; smart cities.

This book constitutes the refereed proceedings of the 12th International Conference on Intelligent Virtual Agents, IVA 2012, held in Santa Cruz, CA, USA, in September 2012. The 17 revised full papers presented together with 31 short papers and 18 poster papers were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on IVAs on learning environments; emotion and personality; evaluation and empirical studies; multimodal perception and expression; narrative and interactive applications; social interaction; authoring and tools; conceptual frameworks.

Founded in 2004, the Games for Health Project supports community, knowledge and business development efforts to use cutting-edge games and game technologies to improve health and health care. The Games for Health Conference brings together researchers, medical professionals and game developers to share information about the impact of games, playful interaction and game technologies on health, health care and policy. Over two days, more than 400 attendees participate in over 60 sessions provided by an international array of 80+ speakers, cutting across a wide range of activities in health and health care. Topics include exergaming, physical therapy, disease management, health behavior change, biofeedback, rehab, epidemiology, training, cognitive health, nutrition and health education.

5th International Workshop, LTEC 2016, Hagen, Germany, July 25–28, 2016, Proceedings

First International Conference, ITAP 2015, Held as Part of HCI International 2015, Los Angeles, CA, USA, August 2-7, 2015. Proceedings, Part II

Embodying Data

Designing Natural User Interfaces for Touch and Gesture

The Paradigm Shift to Multimodality in Contemporary Computer Interfaces

12th International Conference, ICOST 2014, Denver, CO, USA, June 25-27, 2014, Revised Papers

Motion and Depth Sensing for Natural User Interfaces

Proceedings of the AHFE 2018 International Conference on Human Factors and Systems Interaction, July 21–25, 2018, Loews Sapphire Falls Resort at Universal Studios, Orlando, Florida, USA

Streaming media and interactive television viewing experiences are becoming more commonplace with the introduction of services such as Netflix Streaming, the Apple TV, and Google TV aided by the increase adoption of broadband internet. As these services make their way into the living room, and developers struggle to accommodate more complex interaction requirements, new input methods and interfaces need to be developed. Current interfaces for controlling interactive TV and media management have typically been designed for the desktop and laptop experience, using conventional input devices like a trackpad, mouse and keyboard. These techniques are difficult to reconcile with the typical TV viewing experience. We designed an experiment to test a representative interactive TV interface with a number of emerging input technologies like the Nintendo Wiimote, Microsoft Kinect and tablet applications. We measured user performance with these devices while encumbered by a beverage and plate of food in order to simulate a living room experience. We found that while most of these technologies are suitable for navigating an Interactive TV experience, their use challenges us to rethink the user experience, and places limitations on things like button size and placement, as well as the types of UI widgets we can use. We hope these guidelines and heuristics will help in the design of future interactive TV experiences, as well as the development of novel interaction techniques for the TV viewing experience.

Develop applications in Microsoft Kinect 2 using gesture and speech recognition, scanning of objects in 3D, and body tracking. Create motion-sensing applications for entertainment and practical uses, including for commercial products and industrial applications. Beginning Microsoft Kinect for Windows SDK 2.0 is dense with code and examples to ensure that you understand how to build Kinect applications that can be used in the real world. Techniques and ideas are presented to facilitate incorporation of the Kinect with other technologies. What You Will Learn Set up Kinect 2 and a workspace for Kinect application development Access audio, color, infrared, and skeletal data streams from Kinect Use gesture and speech recognition Perform computer vision manipulations on image data streams Develop Windows Store apps and Unity3D applications with Kinect 2 Take advantage of Kinect Fusion (3D object mapping technology) and Kinect Ripple (Kinect projector infotainment system) Who This Book Is For Developers who want to include the simple but powerful Kinect technology into their projects, including amateurs and hobbyists, and professional developers

This book constitutes the proceedings of the 15th European Conference on Technology Enhanced Learning, EC-TEL 2020, held in Heidelberg, Germany, in September 2020. The 24 research papers and 20 demo and 5 poster papers presented in this volume were carefully reviewed and selected from 91 submissions. The European Conference on Technology-Enhance Learning, which celebrates its 15th anniversary this year, is committed to address global challenges and quality education. The papers deal with the Sustainable Development Goals, particularly SDG 4 and SDG 10, to help to reduce the existing gaps and inequalities between countries and regions from around the world in terms of inclusiveness, equity, access, and quality of education. The chapters: “Designing an Online Self-Assessment for Informed Study Decisions: The User Perspective”; “Living with Learning Difficulties: Two Case Studies Exploring the Relationship Between Emotion and Performance in Students With Learning Difficulties”; “Applying Instructional Design Principles on Augmented Reality Cards for Computer Science Education”; and “Teaching Simulation Literacy With Evacuations - Concept, Technology, and Material for a Novel Approach” are available open access under a Creative Commons Attribution 4.0 International License via link.springer.com. Due to the Corona pandemic EC-TEL 2020 was held as a virtual event.

This book constitutes the refereed proceedings of the 6th International Workshop on Ambient Assisted Living, IWAAL 2014, held in Belfast, UK, in December 2014. The 42 full papers presented with 12 papers of the workshop WAGER 2014 and 10 papers of a special session HTA were carefully reviewed and selected from numerous submissions. The focus of the papers is on following topics: ADL detection, recognition, classification; behavioural changes, coaching and education; AAL design and technical evaluation; expression, mood and speech recognition; health monitoring, risk prediction and assessment; localization; and user preferences, usability, AAL acceptance and adoption.

Learning Technology for Education in Cloud – The Changing Face of Education**12th International Conference, IVA 2012, Santa Cruz, CA, USA, September, 12-14, 2012. Proceedings****Interaction Design for 3D User Interfaces****4th International Conference, ITAP 2018, Held as Part of HCI International 2018, Las Vegas, NV, USA, July 15–20, 2018, Proceedings, Part II****Universal Access in Human–Computer Interaction. Designing Novel Interactions****A Case Study Approach****Chinese Aesthetics, Interactive Visualization and Gaming Technologies****100 Ways to Design Better Desktop, Web, and Mobile Interfaces**

This book constitutes the refereed proceedings of the 4th International Conference on Serious Games Development and Applications, SGDA 2013, held in Trondheim, Norway, in September 2013. The 32 papers (23 full papers, 9 short papers/posters and 2 invited keynotes) presented were carefully reviewed and selected from various submissions. The papers are organized in topical sections on games for health, games for education and training, games for other purposes, game design and theories, gaming interface, policy matters.

The two LNCS volume set 9193-9194 constitutes the refereed proceedings of the First International Conference on Human Aspects of IT for the Aged Population, ITAP 2015, held as part of the 17th International Conference on Human-Computer Interaction HCII 2015, held in Los Angeles, CA, USA, in August 2015, jointly with 15 other thematically conferences. The total of 1462 papers and 246 posters presented at the HCII 2015 conferences were carefully reviewed and selected from 4843 submissions. These papers of the two volume set address as follows: LNCS 9193, Design for Aging (Part I), addressing the following major topics: HCI design and evaluation methods for the elderly; ICT use and acceptance; aging, the web and social media; and the elderly and mobile devices and LNCS 9194, Design for Everyday Life (Part II), addressing the following major topics: health care technologies and services for the elderly; home and work support; smart environment and AAL; and communication, games, and entertainment.

The three-volume set LNCS 10277-10279 constitutes the refereed proceedings of the 11th 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.