# A Touch Of Code Interactive Installations And Experiences

Digital technology has not only revolutionized the way designers work, but also the kinds of designs they produce. The development of the computer as a design environment has encouraged a new breed of digital designer: keen to explore the unique creative potential of the co Graphic Design introduces the creative potential of computational data and how it can be used to inform and create everything from typography, print and moving graphics to interactive design and physical installations. Using code as a creative environment allows designers to software tools, and create a set of unique, digitally informed pieces of work. The use of code offers a new way of thinking about and creating design for the digital environment. Each chapter outlines key concepts and techniques, before exploring a range of innovative projects artists and designers who created them. These provide an inspirational, real-world context for every technique. Finally each chapter concludes with a Code section, guiding you through the process of experimenting with each technique yourself (with sample projects and code ex language supplied online to get you started).

A Touch of CodeInteractive Installations and ExperiencesGestalten Verlag

Looking for an A-Z, one-stop, comprehensive book on museums? Wish you were able to have one of the world's leading museum consultants spend a couple of days with you, talking you through how to start a museum, how museums work, how to set up an exhibit, and more? wishes. In one short volume, Mark Walhimer covers: • Essential Background, such as what is a museum, a quick history of museums, and 10 steps to starting a museum • Operational Basics, such as branding, marketing, strategic planning, governance, accessibility, and day-to-da scenes in a museum, ranging from finances to fundraising to art handling, exhibit management, and research • The Visitor Experience, planning a museum, designing exhibits for visitors, programming, and exhibit evaluation. Features that even the most experienced museum profes community outreach checklist, a fundraising checklist, a questionnaire for people considering starting a new museum, and an exhaustive, well-organized list of online resources for museum operations. The book's contents were overseen by a six-member international advisory bo day include a museum toolbox full of useful forms, checklists, and worksheets, and a glossary of essential museum-related terms. In addition to the printed book, Museums 101 also features a companion website exclusively for readers of the book. The website— museums101.co resources in the museum world, • downloadable sample documents, • a glossary, • a bibliography of sources for further reading, and • photographs of more than 75 museums of all types. Museums 101 Advisory Board • Jim DeMersman, Executive Director, Museum on Main, America • David L. Godfrey, C.P.A., Allison & Godfrey, Certified Public Accountants, Norwalk, Connecticut, United States of America • Van A. Romans, President, Fort Worth Museum of Science and History, Fort Worth, Texas, and Board of Trustees, American Alliance of Museums, Un Solovyev, Ph.D., Department of Greek & Roman Antiquities, The State Hermitage Museum, Russia • Alison Spence, Exhibitions and Loans Registrar, National Museum of Australia, Canberra ACT, Australia • Audrey Vermette, Director of Programs and Public Affairs, Canadian Museums If you want to get ahead in this new era of interaction design, this is the reference you need. Nintendo's Wii and Apple's iPhone and iPod Touch have made gestural interfaces popular, but until now there's been no complete source of information about the technology. Designing essential information about kinesiology, sensors, ergonomics, physical computing, touchscreen technology, and new interface patterns -- all you need to know to augment your existing skills in "traditional" web design, software, or product development. Packed with informative ide you: Get an overview of technologies surrounding touchscreens and interactive environments Learn the process of designing gestural interfaces, from documentation to prototyping to communicating to the audience what the product does Examine current patterns and trends about the techniques used by practicing designers and developers today See how other designers have solved interface challenges in the past Look at future trends in this rapidly evolving field Only six years ago, the gestural interfaces introduced in the film Minority Report wer technological, social, and market forces, we see similar interfaces deployed everywhere. Designing Gestural Interfaces will help you enter this new world of possibilities.

August 22-24, 1984 : Conference Proceedings
Handbook of Research on Human-Computer Interfaces and New Modes of Interactivity
Researching Interactive Communication Behavior
The Johns Hopkins Guide to Digital Media
Programming interactive installations using the software package Max/MSP/Jitter
Create Interactive Art with Code
Volume I

Education has changed dramatically in recent years as educational technologies evolve and develop at a rapid pace. Teachers and institutions must constantly update their practices and curricula to match this changing landscape to ensure students receive the best education possible. 3D printing has emerged as a new technology that has the potential to enhance student learning and development. Moreover, the availability of makerspaces within schools and libraries allows students to utilize technologies that drive creativity. Further study on the strategies and challenges of implementation is needed for educators to appropriately adopt these learning practices. The Research Anthology on Makerspaces and 3D Printing in Education considers the benefits these technologies provide in relation to education as well as the various ways they can be utilized in the classroom for student learning. The book also provides a review of the difficulties educators face when implementing these technologies into their curricula and ensuring student success. Covering topics such as educational technologies, creativity, and online learning, this major reference work is ideal for administrators, principals, researchers, scholars, practitioners, academicians, instructors, and students.

The book describes recent research results in the areas of modelling, creation, management and presentation of interactive 3D multimedia content. The book describes the current state of the art in the field and identifies the most import research and design issues. Consecutive chapters address these issues. These are: database modelling of 3D content, security in 3D environments, describing interactivity of content, searching content, visualization of search results, modelling mixed reality content, and efficient creation of interactive 3D content. Each chapter is illustrated with example applications based on the proposed approach. The final chapter discusses some important ethical issues related to the widespread use of virtual environments in everyday life. The book provides ready to use solutions for many important problems related to the creation of interactive 3D multimedia applications and will be a primary reading for researchers and developers working in this domain.

Admit it you've always wanted to know: WHAT was Jack thinking? Magic beans? Come on! Get into Jack's head and the mother's, and the giant's! as You Choose your path through three new versions of the famous fairy tale, with delightful (or disastrous!) consequences.

The augmentation of urban spaces with technology, commonly referred to as Media Architecture, has found increasing interest in the scientific community within the last few years. At the same time architects began to use digital media a a new material apart from concrete, glass or wood to create buildings and urban structures. Simultaneously, Human-Computer Interaction (HCI) researchers began to exploit the interaction opportunities between users and buildings and to bridge the gaps between interface, information medium and architecture. As an example, they extended architectural structures with interactive, light-emitting elements on their outer shell, thereby transforming the surfaces of these structures into giant public screens. At the same time the wide distribution of mobile devices and the coverage of mobile internet allow manifold interaction opportunities between open data and citizens, thereby enabling the internet of things in the public domain. However, the appropriate distribution of information to all citizens is still cumbersome and a mutual dialogue not always successful (i.e. who gets what data and when?). In this book we therefore provide a deeper investigation of Using Information and Media as Construction Material with media architecture as an input and output medium.

Collaboration Meets Interactive Spaces
Practical Programming for Total Beginners
Data-driven Graphic Design
Jack and the Beanstalk
A Touch of Code
Ubiquitous Inclusive Learning in a Digital Era
7th International Workshop, IDMS 2000 Enschede, The Netherlands, October 17-20, 2000 Proceedings

Knowing the industry-standard animation and interactivity tool Adobe Animate CC (previously known as "Flash Professional") can help you get a foothold in the exciting web design and mobile app-development world. Learn Animate CC by building cool creative projects that will teach you how to: Design and animate vector artwork Compose an animated greeting card using HTML5 Build a promotional video with text and images animated in 3D Construct a working digital clock using ActionScript Design and code an interactive quiz for mobile devices This study guide uses more than 6 hours of video integrated with text to help you gain real-world skills that will get you started in your career designing and building interactive media using Adobe Animate CC. It lays the foundation for taking the Adobe Certified Associate (ACA) exam in Interactive Media Using Adobe Flash Professional CC (name correct at press time) and helps prepare you for an entry-level position in a competitive job market. Purchasing this book gives you access to valuable online extras. Follow the instructions in the book's "Getting Started" section to unlock access to: The Web Edition containing instructional video embedded in the complete text of the book with interactive review questions along with product updates Downloadable lesson file you need to work through the projects When creating the Adobe Certified Associate examination, Adobe conducted research to identify the foundational skills students need to effectively communicate using digital media tools. Based on feedback from educators, design professionals, businesses, and educational institutions around the world, the objectives cover entry-level skill expectations for each topic. The ACA exams have proved to be highly successful around the world. To create this new product, Peachpit and Adobe Press have joined forces with team of outstanding instructors who have a great track record getting students certified: Rob Schwartz and his colleagues at BrainBuffet.com Joseph Labrecque is a senior interactive software engineer at the University of Denver where he also teaches classes on Adobe Animate CC (formerly Flash Professional), web animation, graphics production, and mobile application design. Joseph is an Adobe Education Leader (AEL) and an Adobe Community Professional. He received the Adobe Education Impact Award in 2010 and currently serves on the AEL Advisory Board. Joseph produces written and video content for Adobe Press, Peachpit, O'Reilly, Lynda.com, and BrainBuffet.com. What you need to use this book: Adobe Animate CC (2015 release) software, for either Windows or Mac OS. (Software not included.)

Larry the lovable monster from Don't Push the Button! is back with another hilarious, interactive adventure! I know what you're thinking: this is a pretty cool-looking book. But... DON'T TOUCH THIS BOOK! (Don't even try it, bub.) Okay, okay. You can touch, but you can only use ONE finger. Whoa. How'd you do that? Larry is a loveable monster, but he has trouble sharing. It's up to you to show him how it's done!

Kivy – Interactive Applications and Games in Python Second Edition, will equip you with all the necessary knowledge to create interactive, responsive, and cross-platform applications and games. This book introduces the Kivy language and the necessary components so you can implement a graphical user interface (GUI) and learn techniques to handle events, detect gestures, and control multi-touch actions. You will learn strategies to animate your applications, and obtain interactive, professional-looking, and responsive results. You will be applying knowledge throughout the book by developing three applications and tackling their diverse programming challenges.

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to: • Search for text in a file or across multiple files • Create, update, move, and rename files and folders • Search the Web and download online content • Update and format data in Excel spreadsheets of any size • Split, merge, watermark, and encrypt PDFs • Send email responses and text notifications • Fill out online forms Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

Using Information and Media as Construction Material
Digital Interactive Installations
Creative Coding for Visual Communication
Cinderella
An Introduction to Designing with
Wake Up, Sleeping Beauty
9th International Conference, DUXU 2020, Held as Part of the 22nd HCI International Conference, HCII 2020, Copenhagen, Denmark, July 19–24, 2020, Proceedings, Part II

As audiences are increasingly no longer solely listeners but also active producer-consumers, and as video games and other interactive systems increasingly permeate our daily lives, understanding interactivity and its impact on the audience has never been more important. A collection of newly commissioned chapters on interactivity in music and sound edited by preeminent scholars in the field, this book marks the beginning of a journey into understanding the ways in which we interact with sound, and offers a new set of analytical tools for the growing field of interactive audio. What does it mean to interact with sound? How does interactivity alter our experience as creators and listeners? What makes interactive audio different from non-interactive audio? Where does interacting with audio fit into our understanding of sound and music? What does the future hold for interactive media when it comes to our musical and sonic experiences? And how do we begin to approach interactive audio from a theoretical perspective? The Oxford Handbook of Interactive Audio answers these questions by exploring the full range of interactive audio in video games, performance, education, environmental design, toys, and artistic practice. Examining these questions from a range of approaches -- technological, emotional, psychological, and physical -- the book provides a thorough overview of the fascinating experience of interactive sound.

This book offers a timely discussion about the interventions and tensions between two contested and contentious fields, performance and phenomenology, with international case studies that map an emerging twenty-first century terrain of critical and performance practice. Building on the foundational texts of both fields that established the performativity of perception and cognition, Performance and Phenomenology continues a tradition that considers experience to be the foundation of being and meaning. Acknowledging the history and critical polemics against phenomenological methodology and against performance as a field of study and category of artistic production, the volume provides both an introduction to core thinkers and an expansion on their ideas in a wide range of case studies. Whether addressing the use of dead animals in performance, actor training, the legal implications of thinking phenomenologically about how we walk, or the intertwining of digital and analog perception, each chapter explores a world comprised of embodied action and thought. The established and emerging scholars contributing to the volume develop insights central to the phenomenological tradition while expanding on the work of contemporary theorists and performers. In asking why performance and phenomenology belong in conversation together, the book suggests how they can transform each other in the process and what is at stake in this transformation.

Create and publish your own interactive data visualization projects on the Web—even if you have little or no experience with data visualization or web development. It's easy and fun with this practical, hands-on introduction. Author Scott Murray teaches you the fundamental concepts and methods of D3, a JavaScript library that lets you express data visually in a web browser. Along the way, you'll expand your web programming skills, using tools such as HTML and JavaScript. This step-by-step guide is ideal whether you're a designer or visual artist with no programming experience, a reporter exploring the new frontier of data journalism, or anyone who wants to visualize and share data. Learn HTML, CSS, JavaScript, and SVG basics Dynamically generate web page elements from your data—and choose visual encoding rules to style them Create bar charts, scatter plots, pie charts, stacked bar charts, and force-directed layouts Use smooth, animated transitions to show changes in your data Introduce interactivity to help users explore data through different views Create customized geographic maps with data Explore hands-on with downloadable code and over 100 examples

Over the past decade the field of Human-Computer Interaction has evolved from the study of the usability of interactive products towards a more holistic understanding of how they may mediate desired human experiences. This book identifies the notion of diversity in users' experiences with interactive products and proposes methods and tools for modeling this along two levels: (a) interpersonal diversity in users' responses to early conceptual designs, and (b) the dynamics of users' experiences over time. The Repertory Grid Technique is proposed as an alternative to standardized psychometric scales for modeling interpersonal diversity in users' responses to early concepts in the design process, and new Multi-Dimensional Scaling procedures are introduced for modeling such complex quantitative data. iScale, a tool for the retrospective assessment of users' experiences over time is proposed as an alternative to longitudinal field studies, and a semi-automated technique for the analysis of the elicited experience narratives is introduced. Through these two methodological contributions, this book argues against averaging in the subjective evaluation of interactive products. It proposes the development of interactive tools that can assist designers in moving across multiple levels of abstraction of empirical data, as design-relevant knowledge might be found on all these levels. Foreword by Jean-Bernard Martens and Closing Note by Marc Hassenzahl.

The SparkFun Guide to Processing
Design, User Experience, and Usability: User Experience in Novel Technological Environments
Performance and Phenomenology
Proceedings of 2017 Chinese Intelligent Systems Conference
Touchscreens and Interactive Devices
Museums 101
Perspectives in a Global World

Re-envisioning the Contemporary Art Canon: Perspectives in a Global World seeks to dissect and interrogate the nature of the present-day art field, which has experienced dramatic shifts in the past 50 years. In discussions of the canon of art history, the notion of 'inclusiveness', both at the level of rhetoric and as a desired practice is on the rise and gradually replacing talk of 'exclusion', which dominated critiques of the canon up until two decades ago. The art field has dramatically, if insufficiently, changed in the half-century since the first protests and critiques of the exclusion of 'others' from the art canon. With increased globalization and shifting geopolitics, the art field is expanding beyond its Euro-American focus, as is particularly evident in the large-scale international biennales now held all over the globe. Are canons and counter-canons still relevant? Can they be re-envisioned rather than merely revised? Following an introduction that discusses these issues, thirteen newly commissioned essays present case studies of consecration in the contemporary art field, and three commissioned discussions present diverse positions on issues of the canon and consecration processes today. This volume will be of interest to instructors and students of contemporary art, art history, and museum and curatorial studies.

"A fractured fairy tale You Choose adventure about Goldilocks and the Three Bears, featuring three different story lines and three different points of view"--
In this You Choose adventure, Cinderella can be a modern-day girl living in a city, a young man in a medieval fairy tale, or a girl in a futuristic space society--the choice is up to the reader.
Today's designers are creating compelling atmospheres and interactive experiences by merging hardware and software with architecture and design. This book is a collection of this innovative work produced where virtual realms meet the real world and where dataflow confronts the human senses. It presents an international spectrum of interdisciplinary projects at the intersection of laboratory, trade show, and urban space that play with the new frontiers of perception, interaction, and staging created by current technology. The work reveals how technology is fundamentally changing and expanding strategies for the targeted use of architecture, art, communication, and design for the future.
Second International Conference, DUXU 2013, Held as Part of HCI International 2013, Las Vegas, NV, USA, July 21-26, 2013, Proceedings, Part III
Managing Interactive Video/multimedia Projects
Learn Adobe Animate CC for Interactive Media
A Sourcebook of Methods and Measures
An Interactive Fairy Tale Adventure
Adobe Certified Associate Exam Preparation
Don't Push the Button!

*Due to its versatility and accessibility, individuals all around the world routinely use various forms of technology to interact with one another. Over the years, the design and development of technologies and interfaces have increasingly aimed to improve the human-computer interactive experience in unimaginable ways. The Handbook of Research on Human-Computer Interfaces and New Modes of Interactivity is a collection of innovative research on the methods and applications of interactive technologies in the modern age. Highlighting topics including digital environments, sensory applications, and transmedia applications, this book is ideally designed for academicians, researchers, HCI developers, programmers, IT consultants, and media specialists seeking current research on the design, application, and advancement of different media technologies and interfaces that*

*can support interaction across a wide range of users.*

*Prince Eggbert makes a series of increasingly noisy tries to awaken a sleeping princess, but it is his assistant's gentle kiss that succeeds.*

*Create and publish your own interactive data visualization projects on the web—even if you have little or no experience with data visualization or web development. It's inspiring and fun with this friendly, accessible, and practical hands-on introduction. This fully updated and expanded second edition takes you through the fundamental concepts and methods of D3, the most powerful JavaScript library for expressing data visually in a web browser. Ideal for designers with no coding experience, reporters exploring data journalism, and anyone who wants to visualize and share data, this step-by-step guide will also help you expand your web programming skills by teaching you the basics of HTML, CSS, JavaScript, and SVG. Learn D3 4.x—the latest D3 version—with downloadable code and over 140 examples Create bar charts, scatter plots, pie charts, stacked bar charts, and force-directed graphs Use smooth, animated transitions to show changes in your data Introduce interactivity to help users explore your data Create custom geographic maps with panning, zooming, labels, and tooltips Walk through the creation of a complete visualization project, from start to finish Explore inspiring case studies with nine accomplished designers talking about their D3-based projects*

*This book constitutes the refereed proceedings of the 9th International Conference on Design, User Experience, and Usability, DUXU 2020, held as part of the 22nd International Conference on Human-Computer Interaction, HCII 2020, in Copenhagen, Denmark, in July 2020. The conference was held virtually due to the COVID-19 pandemic. From a total of 6326 submissions, a total of 1439 papers and 238 posters has been accepted for publication in the HCII 2020 proceedings. The 50 papers included in this volume were organized in topical sections on interactions in intelligent and IoT environments, usability aspects of handheld and mobile devices, designing games and immersive experiences, and UX studies in automotive and transport.*

*Interactive 3D Multimedia Content*
*Improving the User Experience Through Animation*
*Code as Creative Medium*
*An Interactive Book with Sounds*
*Traditions and Transformations*
*Sixth Annual Conference on Interactive Videodisc in Education and Training*
*The Oxford Handbook of Interactive Audio*

Effective interface animation deftly combines form and function to improve feedback, aid in orientation, direct attention, show causality, and express your brand's personality. Designing Interface Animation shows you how to create web animation that balances purpose and style while blending seamlessly into the user's experience. This book is a crash course in motion design theory and practice for web designers, UX professionals, and front-end developers alike.

There's only one rule in Larry's book: don't push the button. (Seriously, don't even think about it!) Even if it does look kind of nice, you must never push the button. Who knows what would happen? Okay, quick. No one is looking... push the button. Uh, oh.

Researching Interactive Communication Behavior by C. Arthur VanLear and Daniel J. Canary provides students and experienced researchers with tools for studying communication behaviors through direct observation. The sourcebook provides sound coverage of both cutting-edge and well-established systems, measurements, and procedures, as well as detailed information on measurement selection, coding, reliability assessment, and analysis. In addition to offering theoretical discussions, each chapter also focuses on how to apply systems and principles in conducting actual original research and uses examples and exemplars to help readers understand and apply the methods.

In open education, equality, accessibility, inclusiveness, and lifelong learning are key concerns. To meet, adapt to, and anticipate global goals and needs, as well as address open education concerns, educational programs require systemic changes and innovative leadership for advanced learning environments. Ubiquitous Inclusive Learning in a Digital Era provides innovative insights into the issues and current trends on open, online, flexible education and technology-enabled learning. The content within this publication represents the work of open online learning, hybrid learning, and inclusiveness. It is designed for educational administrators, teachers, librarians, government officials, and graduate-level students seeking covering on topics centered on educational technologies and equal access education.

Don't Touch This Book!
Design, User Experience, and Usability. Design for Contemporary Interactive Environments
Interactive Data Visualization for the Web
Re-envisioning the Contemporary Art Canon

Handbook of Research on Human Development in the Digital Age
Media Architecture
Author Scott Murray teaches you the fundamental concepts and methods of D3, a JavaScript library that lets you express data visually in a web browser.

This book presents selected research papers from CISC'17, held in MudanJiang, China. The topics covered include Multi-agent system, Evolutionary Computation, Artificial Intelligence, Complex systems, Computation intelligence and soft computing, Intelligent control, Advanced control technology, Robotics and applications, Intelligent information processing, Iterative learning control, Machine Learning, and etc. Engineers and researchers from academia, industry, and government can gain valuable insights into solutions combining ideas from multiple disciplines in the field of intelligent systems.

The rapid evolution of technology continuously changes the way people interact, work, and learn. By examining these advances, researchers can further optimize the various opportunities that technology provides. The Handbook of Research on Human Development in the Digital Age is a pivotal reference source presenting the latest scholarly research on the impact of technology on the population through different theories and perspectives. Featuring extensive coverage on a broad range of topics such as cyberbullying, mobile technology, and social skills development, this publication is ideally designed for academicians, researchers, and practitioners seeking current research on new trends in technology that impact society.

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.

A Handbook for Computational Art and Design
Interactive Installations and Experiences
Designing Interface Animation
Kivy – Interactive Applications and Games in Python
Modeling Users' Experiences with Interactive Systems
Goldilocks and the Three Bears
Research Anthology on Makerspaces and 3D Printing in Education

This book explores the technological advances and social interactions between interactive spaces, surfaces and devices, aiming to provide new insights into emerging social protocols that arise from the experimentation and long-term usage of interactive surfaces. This edited volume brings together researchers from around the world who investigate interactive surfaces and interaction techniques within large displays, wearable devices, software development, security and emergency management. Providing both theory and practical case studies, the authors look at current developments and challenges into 3D visualization, large surfaces, the interplay of mobile phone devices and large displays, wearable systems and head mounted displays (HMD'S), remote proxemics and interactive wall displays and how these can be employed throughout the home and work spaces. Collaboration Meets Interactive Spaces is both for researchers and industry practitioners, providing readers with a coherent narrative into the current state-of-the-art within interactive surfaces and pervasive display technology, providing necessary tools and techniques as interactive media increasingly permeates everyday contexts.

An essential guide for teaching and learning computational art and design: exercises, assignments, interviews, and more than 170 illustrations of creative work. This book is an essential resource for art educators and practitioners who want to explore code as a creative medium, and serves as a guide for computer scientists transitioning from STEM to STEAM in their syllabi or practice. It provides a collection of classic creative coding prompts and assignments, accompanied by annotated examples of both classic and contemporary projects, and more than 170 illustrations of creative work, and features a set of interviews with leading educators. Picking up where standard programming guides leave off, the authors highlight alternative programming pedagogies suitable for the art- and design-oriented classroom, including teaching approaches, resources, and community support structures.

This book constitutes the refereed proceedings of the 7th International Workshop on Interactive Distributed Multimedia Systems and Telecommunication Services, IDMS 2000, held in Enschede, The Netherlands in October 2000. The 24 revised full papers presented together with three invited contributions were carefully reviewed and selected from 60 submissions. The book offers topical sections on efficient audio/video coding and delivery; multimedia conferencing, synchronization and multicast; communication, control, and telephony over IP networks; QoS models and architectures; multimedia applications and user aspects; design and implementation approaches; and mobile multimedia and ubiquitous computing systems.

Inhaltsangabe:Abstract: The arts have always been influenced by new evolving technologies. A certain aesthetic turning point was brought about by the silent 'algorithmic revolution' we have not hardly noticed, as the curators of the Centre of Art and Media (ZKM) in Karlsruhe, Germany, propose with their current exhibition. At present, barely any part of social life is not influenced by these decision-making processes (algorithms) habitually executed by our computer devices. The radical changes this revolution causes for all of us are incalculable. However, we should not forget that algorithms, a well-defined set of technical instructions with a finite number of rules designed to solve a specific problem, have been incorporated as a creative instrument in the work of Albrecht D ?urer and other artists since the late middle ages. The strict application of algorithms in art ultimately led to works explicitly integrating the recipient into the creative process, eventually culminating in the new media arts. Today's art practices transform observers into users. Emerging with the changing paradigm is a new type of creator of cultural artefacts. This has been accompanied now for more than two decades by a fruitful collaborative atmosphere between the formerly strictly separated traditions of art and science. More often than not artists like such as the pioneers Christa Sommerer, Laurent Mignonneau, and Jeffrey Shaw are at the same time scientific researchers found in institutional laboratories as heads of larger teams which include programmers, engineers and scientists of various different disciplines. They develop new hard- and software technologies themselves. All in all this development places not only an inestimable number of creative tools in the hands of the artist, but a highly dynamic and hybrid field that forms new areas like telepresence art, biocybernetic art, robotics, Net art, space art, experiments in nanotechnology, artificial or A-life art, creating virtual agents and avatars, datamining, mixed realities and database- supported art, which all explore the technologies of tomorrow. Not long ago, the artists sought to explore software coding as the foundation of their expression and as a 'material' with specific properties. Like Max/MSP and others, new alternative programming environments based on a graphical interface concept facilitate bridging the gap between art and technology, and bring the artists back more control over the creative [...]

Interactive Distributed Multimedia Systems and Telecommunication Services
Models for Creation, Management, Search and Presentation
An Interactive Editor for Definition of Touch-sensitive Zones for a Graphic Display
Automate the Boring Stuff with Python, 2nd Edition
Designing Gestural Interfaces

**The result is an easy-to-consult reference for digital media scholars or anyone wishing to become familiar with this fast-developing field.**

**Processing is a free, beginner-friendly programming language designed to help non-programmers create interactive art with code. The SparkFun Guide to Processing, the first in the SparkFun Electronics series, will show you how to craft digital artwork and even combine that artwork with hardware so that it reacts to the world around you. Start with the basics of programming and animation as you draw colorful shapes and make them bounce around the screen. Then move on to a series of hands-on, step-by-step projects that will show you how to: –Make detailed pixel art and scale it to epic proportions –Write a maze game and build a MaKey MaKey controller with fruit buttons –Play, record, and sample audio to create your own soundboard –Fetch weather data from the Web and build a custom weather dashboard –Create visualizations that change based on sound, light, and temperature readings With a little imagination and Processing as your paintbrush, you'll be on your way to coding your own gallery of digital art in no time! Put on your artist's hat, and begin your DIY journey by learning some basic programming and making your first masterpiece with The SparkFun Guide to Processing. The code in this book is compatible with Processing 2 and Processing 3.**