Composition For Computer Musicians

A comprehensive, practical guide to composing video game music, from acquiring the necessary skills to finding work in the field. Music in video games is often a sophisticated, complex composition that serves to engage the player, set the pace of play, and aid interactivity. Composers of video game music must master an array of specialized skills not taught in the conservatory, including the creation of linear loops, music chunks for horizontal resequencing, and compositional fragments for use within a generative framework. In A Composer's Guide to Game Music, Winifred Phillips—herself an award-winning composer of video game music—provides a comprehensive, practical guide that leads an aspiring video game composer from acquiring the necessary creative skills to understanding the function of music in games to finding work in the field. Musicians and composers may be drawn to game music composition because the game industry is a multibillion-dollar, employment-generating economic powerhouse, but, Phillips writes, the most important qualification for a musician who wants to become a game music composer is a love of video games. Phillips offers detailed coverage of essential topics, including musicianship and composition experience; immersion; musical themes; music and game genres; workflow; working with a development team; linear music; interactive music, both rendered and generative; audio technology, from mixers and preamps to software; and running a business. A Composer's Guide to Game Music offers indispensable guidance for musicians and composers who want to deploy their creativity in a dynamic and growing industry, protect their musical identities while working in a highly technical field, and create great music within the constraints of a new medium.

***** CLICK THE AUTHOR NAME "CREATEMUSIC PUBLICATIONS" FOR MORE NAMES ***** The music lover you know and love will appreciate this awesome gift. This music notebook gives musicians a special place to write and learn new music. This matte finished musical writing pad comes complete with over 100 pages (approx. 53 sheets). It has a flexible lightweight paperback cover, which makes it lighter and easier to carry around, and comes complete with a cool trendy cover. Dimensions: 6 x 9 inch giving plenty of space for 12 staves per page with staff lines notation guides. This music manuscript is perfect to help: Musicians write learn new music Composers with their music Keep track of your songs keep them organized Noting down songs you want to learn New musicians learn new notes and practice making music And so much more... Set yourself up for success to help you reach your goals and aspirations with this cute music journal. Order yours now!

An encyclopedic handbook on audio programming for students and professionals, with many cross-platform open source examples and a DVD covering advanced topics. This comprehensive handbook of mathematical and programming techniques for audio signal processing will be an essential reference for all computer musicians, computer scientists, engineers, and anyone interested in audio. Designed to be used by readers with varying levels of programming expertise, it not only provides the foundations for music and audio development but also tackles issues that sometimes remain mysterious even to experienced software designers. Exercises and copious examples (all cross-platform and based on free or open source software) make the book ideal for classroom use. Fifteen chapters and eight appendixes cover such topics as programming basics for C and C++ (with music-oriented examples), audio programming basics and more advanced topics, spectral audio programming; programming Csound opcodes, and algorithmic synthesis and music programming. Appendixes cover topics in compiling, audio and MIDI, computing, and math. An accompanying DVD provides an additional 40 chapters, covering musical and audio programs with micro-controllers, alternate MIDI controllers, video controllers, developing Apple Audio Unit plug-ins from Csound opcodes, and audio programming for the iPhone. The sections and chapters of the book are arranged progressively and topics can be followed from chapter to chapter and from section to section. At the same time, each section can stand alone as a self-contained unit. Readers will find The Audio Programming Book a trustworthy companion on their journey through making music and programming audio on modern computers.

This book discusses the applications of evolutionary computation to music and the tools needed to create and study such systems. These tools can be combined to create surrogate artificial worlds populated by interacting simulated organisms in which complex musical experiments can be performed. The book demonstrates that evolutionary systems can be used to create and to study musical compositions and cultures in ways that have never before been achieved.

Interactive Composition empowers readers with all of the practical skills and insights they need to compose and perform electronic popular music in a variety of popular styles. The book begins by introducing all of the tools involved in creating interactive compositions through the software Ableton Live and Max for Live. The following chapters then put the tools to use by both describing particular musical styles and also teaching readers how to compose and perform within these styles using the software. As readers progresses through the book, they will learn to use the software to facilitate their own unique compositional objectives. This book takes readers through all of the steps in designing interactive music compositions. It is geared toward both beginners as well as intermediate and advanced readers, and so readers with even little experience working with digital audio software will quickly learn how to design powerful systems that facilitate their unique compositional ideas. A particular feature of this book is that it discusses the historical context of several electronic music styles used by DJs, electronic musicians, and other artists, and then describes, using software, the technical process used in the composition and performance of these styles. Each chapter leads readers to create an original composition in a given style and also discusses the techniques that can be used to perform the piece in an idiomatic fashion.

Develops both the theory and the practice of synthesizing musical sounds using computers. This work contains chapters that starts with a theoretical description of one technique

or problem area and ends with a series of working examples, covering a range of applications. It is also suitable for computer music researchers.

Electronic music evokes new sensations, feelings, and thoughts in both composers and listeners. Opening the door to an unlimited universe of sound, it engages spatialization as an integral aspect of composition and focuses on sound transformation as a core structural strategy. In this new domain, pitch occurs as a flowing and ephemeral substance that can be bent, modulated, or dissolved into noise. Similarly, time occurs not merely as a fixed duration subdivided by ratios, but as a plastic medium that can be generated, modulated, reversed, warped, scrambled, and granulated. Envelope and waveform undulations on all time scales interweave to generate form. The power of algorithmic methods amplify the capabilities of music technology. Taken together, these constitute game-changing possibilities. This convergence of technical and aesthetic trends prompts the need for a new text focused on the opportunities of a sound oriented, multiscale approach to composition of electronic music. Sound oriented means a practice that takes place in the presence of sound. Multiscale means an approach that takes into account the perceptual and physical reality of multiple, interacting time scales-each of which can be composed. After more than a century of research and development, now is an appropriate moment to step back and reevaluate all that has changed under the ground of artistic practice. Composing Electronic Music outlines a new theory of composition based on the toolkit of electronic music techniques. The theory consists of a framework of concepts and a vocabulary of terms describing musical materials, their transformation, and their organization. Central to this discourse is the notion of narrative structure in composition-how sounds are born, interact, transform, and die. It presents a guidebook: a tour of facts, history, commentary, opinions, and pointers to interesting ideas and new possibilities to consider and explore.

This book is a full multimedia curriculum that contains over 60 Lesson Plans in 29 Units of Study, Student Assignments Sheets, Worksheets, Handouts, Audio and MIDI files to teach a wide array of musical topics, including: general/basic music theory, music appreciation and analysis, keyboarding, composing/arranging, even ear-training (aural theory) using technology.

This book is a must for musicians, composers and music producers who want to explore the fascinating variety of musical scales that are now used in world music. Included are hundreds of scales from around the world such as: major and minor scales of Western music, diatonic modes, pentatonic scales, scales used in jazz and bebop, artificial and synthetic scales, scales of Greek folk music, pentatonic scales of Japanese and Chinese music, Ethiopian kinit, African kora scales, scales of Indonesian gamelan music, equal tone scales of Thailand and Burma, musical scales of classical Indian music and more. Each scale is presented in multiple formats including guitar tab, keyboard, note names, staff and where appropriate, details of fine tuning. A transposition pattern is also given for each scale, which enables the musician to practise and play the scale in any key required. An explanation of each scale, together with a description of its characteristics is also provided."

So you want to learn the ins and outs of creating dance music and looking to improve your production? Then this book is just for you. No matter what genre you are interested in- trance, techno, garage, chill out, house or what tool you are working with- Abelton, Reason, Reaktor or Absynth, Snowman covers every aspect of dance music production- from sound design, compression and effects to mixing and mastering to help you improve your music. No matter what you level of experience the Dance Music Manual is packed with sound advice, techniques and practical tips to help you achieve professional results. The CD provides demo tracks showing what can be achieved when applying the advice contained in the book, including examples of the quality difference before and after mixing and mastering. The CD also contains free software demos for you to download. For even more advice and resources, check out the book's official website www.dancemusicproduction.com

Back to School Composition Notebook for Music Students with musical instruments on black background. 100 white, wide ruled pages Perfect for students in elementary, middle, high school or college Can be used for any class - English, Math, Science and more 7.7" x 9.25" is the perfect size for backpack or purse Also great as a: Goal Planner To Do List Notebook Shopping List Journal High School Student Gift Middle School Student Present Teacher Supplies Holiday Gift Stocking Stuffer Check out other cover variations of this notebook and other planners and journals by clicking on the Annette Wood Graphics link below the title of this notebook.

"Music Composition 1" is the first book in a two book series by award-winning composer, Jonathan Peters, which explains how music is formed and how to compose your own music. Book 1 covers the study of rhythmic and melodic composition, while book 2 covers harmonic composition and compositional form.Each lesson covers a particular concept (or related concepts). Concepts and compositional techniques are demonstrated throughout the course with real musical examples (pictures and on-line audio samples).Each lesson also contains memory questions, access to on-line quizzes, listening assignments, and transcription/composition assignments. Memory questions serve to summarize and reinforce key concepts learned, while the quizzes tests the students' knowledge and understanding of the material from each lesson. Students who take this course will get practice transcribing music (hearing a rhythm or a melody and writing it down) and also learn how to use music notation software. In the composition assignments students will get real life practice using the information and techniques learned in each lesson to write their own rhythms and melodies.WHAT ARE THE REQUIREMENTS FOR THIS COURSE? To receive free life-time access to the on-line audio samples and quizzes you must have a computer with internet connection, screen, and speakers.A basic knowledge of music theory: students who take this course should be able to read notes in treble and bass clef, understand note durations, meter, key, scales, flats, sharps, intervals (major, minor and perfect), chords (major and minor), chord inversions, tempo, dynamics, and articulations. If you do not already have a rudimentary understanding of music theory, it is recommended that you take a music theory course before this course.Some type of music notation software. The notation software demonstrated in this course is the Finale NotePad software. NotePad is a very basic music notation program and has all the necessary functions for a beginning composition student. An important part of music composition is getting your music to paper, and so this course will also develop the students' ability to properly notate their music. This software not only prints professional looking sheet music, it also allows the student to hear their compositions as they are writing them. You can read more about NotePad and download it for FREE at: www.finalemusic.com/NotePadAlthough not a necessity, it is very beneficial that the student have some ability to play the piano (or other instrument)WHAT AM I GOING TO GET OUT OF THIS COURSE?Includes free life-time access to on-line audio samples and quizzes for each lessonBy the end of the course you will be able to compose your own rhythms and melodies.You will also learn how to develop your rhythmic and melodic material through a wide variety of compositional techniques.You will get practice transcribing music (hearing rhythms and melodies and then writing them down in notation form).You will get practice notating music using basic music notation software.WHO SHOULD TAKE THIS COURSE?Anyone who has always wanted to learn how to write music!Every student of music!Beginning Composers/SongwritersComposers/Songwriters with previous knowledge or experience who want to brush up and hone their skills (and maybe learn some new techniques!)Although this

course uses many examples from classical music, most of the information and compositional techniques learned in this course can be used by musicians of any genre (including rock, pop, and jazz)If you want to deepen your understanding of music, learn to write it!Note: If at any point in this course you have music composition questions that you would like answered or if you would like to have each composition assignment reviewed and commented on, please contact the author at his web site http://www.ComposerJonathanPeters.com about receiving these services for a fee.

Musicians begin formal training by acquiring a body of musical concepts commonly known as musicianship. These concepts underlie the musical skills of listening, performance, and composition. Like humans, computer music programs can benefit from a systematic foundation of musical knowledge. This book explores the technology of implementing musical processes such as segmentation, pattern processing, and interactive improvisation in computer programs. It shows how the resulting applications can be used to accomplish tasks ranging from the solution of simple musical problems to the live performance of interactive compositions and the design of musically responsive installations and Web sites. Machine Musicianship is both a programming tutorial and an exploration of the foundational concepts of musical analysis, performance, and composition. The theoretical foundations are derived from the fields of music theory, computer music, music cognition, and artificial intelligence. The book will be of interest to practitioners of those fields, as well as to performers and composers.The concepts are programmed using C++ and Max. The accompanying CD-ROM includes working versions of the examples, as well as source code and a hypertext document showing how the code leads to the program's musical functionality.

You've got the power. You don't have to spend thousands of dollars on recording-studio time anymore. Now, using Pro Tools—a digital-audio workstation—you can record demos at home on your own computer, edit tracks, add effects, and even output songs to a CD. But if you're new to working with sound digitally, you face a daunting learning curve. Getting your music gear to work with your desktop computer or laptop—and producing results that you like—involves some unfamiliar tools and concepts. At last, here's a Pro Tools book written by a musician for other musicians! Author Gina Fant-Saez knows first-hand how frustrating it can be when you first make the move to using this complex, studio-quality audio application. Rather than overwhelm you with every detail of the program and complicated terminology or functions you'll never use, Pro Tools for Musicians and Songwriters teaches only the essentials you need to record, enhance, and output your music. With downloadable audio files from www.protoolsformusicians.com to help you get started, Pro Tools for Musicians and Songwriters will show you how to: • Use a metronome (click track) or percussion loop to help you keep time when you record • Record and combine multiple takes to create one seamless composition • Edit your tracks with crossfades, panning, doubling, automation more[• Add and manipulate plug-in effects, such as reverb • Share your Pro Tools files with other musicians around the globe • Output your finished composition to a CD

You might be extremely knowledgeable about the software that you use, have a good understanding of your own genre, and even have a good basic understanding of music theory. However, this does not necessarily mean that you can write effective music tracks. You need another kind of knowledge as well – the knowledge of composition.This friendly guide explains the basics of composing songs and music on the computer using any music using any music creation and recording program, whether you choose Reason, Live, Cubase, Logic, Pro Tools, Digital Performer, Finale, Sibelius, FL Studio, SONAR, or anything else. It's not as hard as it sounds, and this book eases the learning curve so you'll be making music in no time. You'll quickly learn how to program rhythm and drums, create basslines and melodic leads, and use FX and samples. You'll also learn about mixing and mastering your track and distributing it to a mass audience. Composition for Computer Musicians explains it all while showing you the basics of music theory throughout so you'll be sure you're not just making noise on the computer – you're using your computer to make professional-sounding music.

Many DJs, gigging musicians, and electronic music producers understand how to play their instruments or make music on the computer, but they lack the basic knowledge of music theory needed to take their music-making to the next level and compose truly professional tracks. Beneath all the enormously different styles of modern electronic music lie certain fundamentals of the musical language that are exactly the same no matter what kind of music you write. It is very important to acquire an understanding of these fundamentals if you are to develop as a musician and music producer. Put simply, you need to know what you are doing with regard to the music that you are writing. Music Theory for Computer Musicians explains these music theory fundamentals in the most simple and accessible way possible. Concepts are taught using the MIDI keyboard environment and today's computer composing and recording software. By reading this book and following the exercises contained within it, you, the aspiring music producer/computer musician, will find yourself making great progress toward understanding and using these fundamentals of the music language. The result will be a great improvement in your ability to write and produce your own original music!

Awesome Jazz Music Notebook for your personal notes. This awesome, ruled composition notebook is perfect for anyone who loves Jazz Music. Keep the notebook with you at all times and write down your ideas, thoughts and notes. With 120 pages, the notebook offers plenty of space for your notes at school, university or at work. Features: 120 ruled lined pages 6x9 inches College book / school book Personal Notebook Diary Perfect for many occasions as well, such as: Birthday gifts Graduation gifts Gifts for pupils and students Dream journals School activity notebook Vacation travel Journal Home school notebook Boys write journal Girls write journal

Focuses on the role of the computer as a generative tool for music composition. Miranda introduces a number of computer music composition techniques ranging from probabilities, formal grammars and fractals, to genetic algorithms, cellular automata and neural computation. Anyone wishing to use the computer as a companion to create music will find this book a valuable resource. As a comprehensive guide with full explanations of technical terms, it is suitable for students, professionals and enthusiasts alike. The accompanying CD-ROM contains examples, complementary tutorials and a number of composition systems for PC and Macintosh platforms, from demonstration versions of commercial programs to exciting, fully working packages developed by research centres world-wide, including Nyquist, Bol Processor, Music Sketcher, SSEYO Koan, Open Music and the IBVA brainwaves control system, among others. This book will be interesting to anyone wishing to use the computer as a companion to create music. It is a comprehensive guide, but the technical terms are explained so it is suitable for students, professionals and enthusiasts alike.

You can hum it, but can you write it down? When most people think of a composer, they picture a bewigged genius like Mozart or Beethoven frenetically directing mighty orchestras in the ornate palaces of Vienna. While that may have been the case once upon a time, modern composers make themselves heard far beyond the classical conservatoire and concert hall. These days, soundtracks are in high demand in industries such as TV, film, advertising, and even gaming to help create immersive and exciting experiences. Whatever your musical ambitions—composing a dark requiem in a beautiful Viennese apartment or producing the next great Star Wars-like movie theme in LA—the fully updated Music Composition For Dummies hits all the right notes to help you become confident in the theory and practice of composition. To help you translate your musical ideas from fleeting tunes in your head to playable bars and notation on paper, professional composer and instructor Scott Jarrett and music journalist Holly Day take you on a friendly step-by-step journey through the process of musical creation, including choosing the right rhythms and tempos, creating melodies and chord progressions, and working with instruments and voices. You'll learn how to match keys and chords to mood, use form to enhance your creativity, and write in different styles from pop to classical—and you'll even learn how to keep hammering away when inspiration eludes you. Organize and preserve your musical ideas Formalize your knowledge with professional vocabulary Get familiar with composition apps and software Make a demo and market on social media Filled with musical exercises to help you acquire the discipline you need for success, Music Composition For Dummies has everything you need to turn your inner

soundtrack into a tuneful reality!

A comprehensive text and reference that covers all aspects of computer music, including digital audio, synthesis techniques, signal processing, musical input devices, performance software, editing systems, algorithmic composition, MIDI, synthesizer architecture, system interconnection, and psychoacoustics. The Computer Music Tutorial is a comprehensive text and reference that covers all aspects of computer music, including digital audio, synthesis techniques, signal processing, musical input devices, performance software, editing systems, algorithmic composition, MIDI, synthesizer architecture, system interconnection, and psychoacoustics. A special effort has been made to impart an appreciation for the rich history behind current activities in the field. Profusely illustrated and exhaustively referenced and cross-referenced, The Computer Music Tutorial provides a step-by-step introduction to the entire field of computer music techniques. Written for nontechnical as well as technical readers, it uses hundreds of charts, diagrams, screen images, and photographs as well as clear explanations to present basic concepts and terms. Mathematical notation and program code examples are used only when absolutely necessary. Explanations are not tied to any specific software or hardware. The material in this book was compiled and refined over a period of several years of teaching in classes at Harvard University, Oberlin Conservatory, the University of Naples, IRCAM, Les Ateliers UPIC, and in seminars and workshops in North America, Europe, and Asia.

The essential reference to SuperCollider, a powerful, flexible, open-source, cross-platform audio programming language. SuperCollider is one of the most important domain-specific audio programming languages, with potential applications that include real-time interaction, installations, electroacoustic pieces, generative music, and audiovisuals. The SuperCollider Book is the essential reference to this powerful and flexible language, offering students and professionals a collection of tutorials, essays, and projects. With contributions from top academics, artists, and technologists that cover topics at levels from the introductory to the specialized, it will be a valuable sourcebook both for beginners and for advanced users. SuperCollider, first developed by James McCartney, is an accessible blend of Smalltalk, C, and further ideas from a number of programming languages. Free, open-source, cross-platform, and with a diverse and supportive developer community, it is often the first programming language sound artists and computer musicians learn. The SuperCollider Book is the long-awaited guide to the design, syntax, and use of the SuperCollider language. The first chapters offer an introduction to the basics, including a friendly tutorial for absolute beginners, providing the reader with skills that can serve as a foundation for further learning. Later chapters cover more advanced topics and particular topics in computer music, including programming, sonification, spatialization, microsound, GUIs, machine listening, alternative tunings, and non-real-time synthesis; practical applications and philosophical insights from the composer's and artist's perspectives; and "under the hood," developer's-eye views of SuperCollider's inner workings. A Web site accompanying the book offers code, links to the application itself and its source code, and a variety of third-party extras, extensions, libraries, and examples.

Computational approaches to music composition and style imitation have engaged musicians, music scholars, and computer scientists since the early days of computing. Music generation research has generally employed one of two strategies: knowledge-based methods that model style through explicitly formalized rules, and data mining methods that apply machine learning to induce statistical models of musical style. The five chapters in this book illustrate the range of tasks and design choices in current music generation research applying machine learning techniques and highlighting recurring research issues such as training data, music representation, candidate generation, and evaluation. The contributions focus on different aspects of modeling and generating music, including melody, chord sequences, ornamentation, and dynamics. Models are induced from audio data or symbolic data. This book was originally published as a special issue of the Journal of Mathematics and Music.

Unique, Simple and Straightforward Way to Learn Music Theory and Become a Better Musician, Even if You're a Total Beginner! * Updated and massively Expanded edition with Audio examples, new Exercises, and over 150 pages of NEW content! * ** On a special promo price for a limited time! ** Have you ever wanted: To know how understanding music theory can make you a better player (on any instrument)? To unlock the mysteries of notes, intervals, music scales, modes, keys, circle of fifths, chords and chord progressions, and other important concepts in music, and how they all relate to one another? To get a deep understanding of scales, modes and chords, where they come from, what are the different types that exist, how they're built, and how to use any chord or scale in your playing? To learn how rhythm works and how to master your rhythm and time skills that will make you sound like a pro? To know what's the magic behind all the beautiful music that you love and how you can (re)create it? To get a broad perspective of tonal harmony, and how melody, harmony, and rhythm work together? Understand advanced concepts (such as modal playing, atonality, polytonality, free music, etc.) that usually only advanced jazz musicians use? But... Have you ever been put off by music theory or thought that it wasn't necessary, boring or too hard to learn? If you find yourself in any of this, then this book is what you need. It covers pretty much everything that anyone who plays or wants to play music, and wishes to become a better musician, should know. This is one of the most comprehensive and straightforward, evergreen books on music theory that you can find, and you will wish to study it often and keep it forever. The book is structured in a way that is very easy to follow and internalize all the concepts that are explained. You don't have to be a college degree music student in order to understand and use any of this - anyone can do it, even a total beginner! It also doesn't matter what instrument(s) you play nor what is your level of knowledge or playing ability, because music theory is universal and all about what sounds good together! It explains the WHY and HOW, and it is your roadmap, a skill and a tool - guided by your ears - for creating beautiful music This book will give you what is necessary to become a true expert in music theory without frustration and feeling overwhelmed in the process, and this in-turn will have immense benefits to your playing and musicianship! Just use the look inside feature by clicking on the book cover to get a sneak peak of what you'll learn inside... Get this book now and solve all your problems with music theory, and become proficient in this field! Pick up your copy by clicking on the BUY now button at the top of this page.

Summary Programming for Musicians and Digital Artists: Creating Music with ChucK offers a complete introduction to programming in the open source music language ChucK. In it, you'll learn the basics of digital sound creation and manipulation while you discover the ChucK language. As you move example-by-example through this easy-to-follow book, you'll create meaningful and rewarding digital compositions and "instruments" that make sound and music in direct response to program logic, scores, gestures, and other systems connected via MIDI or the network. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About this Book A digital musician must manipulate sound precisely. ChucK is an audio-centric programming language that provides precise control over time, audio computation, and user interface elements like track pads and joysticks. Because it uses the vocabulary of sound, ChucK is easy to learn even for artists with little or no exposure to computer programming. Programming for Musicians and Digital Artists offers a complete introduction to music programming. In it, you'll learn the basics of digital sound manipulation while you learn to program using ChucK. Example-by-example, you'll create meaningful digital compositions and "instruments" that respond to program logic, scores, gestures, and other systems connected via MIDI or the network. You'll also experience how ChucK enables the on-the-fly musical improvisation practiced by communities of "live music coders" around the world. Written for readers familiar with the vocabulary of sound and music. No experience with computer programming is required. What's Inside Learn ChucK and digital music creation side-by-side Invent new sounds, instruments, and modes of performance Written by the creators of the ChucK language About the Authors Perry Cook, Ajay Kapur, Spencer Salazar, and Ge Wang are pioneers in the area of teaching and programming digital music. Ge is the creator and chief architect of the ChucK language. Table of Contents Introduction: ChucK programming for artistsPART 1 INTRODUCTION TO PROGRAMMING IN CHUCK Basics: sound, waves, and ChucK programming Libraries: ChucK's built-in tools Arrays: arranging and accessing your compositional data Sound files and sound manipulation Functions: making your own tools PART 2 NOW IT GETS

REALLY INTERESTING! Unit generators: ChucK objects for sound synthesis and processing Synthesis ToolKit instruments Multithreading and concurrency: running many programs at once Objects and classes: making your own ChucK power tools Events: signaling between shreds and syncing to the outside world Integrating with other systems via MIDI, OSC, serial, and more

Music Theory for Computer MusiciansCourse Technology Ptr

Offers advice for aspiring songwriters and artists on how to transform a song into a musical arrangement for either a single instrument or a group.

Musicians are always quick to adopt and explore new technologies. The fast-paced changes wrought by electrification, from the microphone via the analogue synthesiser to the laptop computer, have led to a wide range of new musical styles and techniques. Electronic music has grown to a broad field of investigation, taking in historical movements such as musique concrte and elektronische Musik, and contemporary trends such as electronic dance music and electronica. The first edition of this book won the 2009 Nicolas Bessaraboff Prize as it brought together researchers at the forefront of the sonic explorations empowered by electronic technology to provide accessible and insightful overviews of core topics and uncover some hitherto less publicised corners of worldwide movements. This updated and expanded second edition includes four entirely new chapters, as well as new original statements from globally renowned artists of the electronic music scene, and celebrates a diverse array of technologies, practices and music.

Teach Your Students How to Use Computing to Explore Powerful and Creative Ideas In the twenty-first century, computers have become indispensable in music making, distribution, performance, and consumption. Making Music with Computers: Creative Programming in Python introduces important concepts and skills necessary to generate music with computers. It interweaves computing pedagogy with musical concepts and creative activities, showing students how to integrate the creativity and design of the arts with the mathematical rigor and formality of computer science. The book provides an introduction to creative software development in the Python programming language. It uses innovative music-creation activities to illustrate introductory computer programming concepts, including data types, algorithms, operators, iteration, lists, functions, and classes. The authors also cover GUIs, event-driven programming, big data, sonification, MIDI programming, client–server programming, recursion, fractals, and complex system dynamics. Requiring minimal musical or programming experience, the text is designed for courses in introductory computer science and computing in the arts. It helps students learn computer programming in a creative context and understand how to build computer music applications. Also suitable for self-study, the book shows musicians and digital music enthusiasts how to write music software and create algorithmic music compositions. Web Resource A supplementary website (http://jythonMusic.org) provides a music library and other software resources used in the text. The music library is an extension of the jMusic library and incorporates other cross-platform programming tools. The website also offers example course and associated media resources.

In The Music Machine, Curtis Roads brings together 53 classic articles published in Computer Music Journal between 1980 and 1985.

The producer's guide to harmony, chord progressions, and song structure in the MIDI grid. As an online class, Dr. Allen has had over 50,000 students use this ground-breaking curriculum to learn music theory. Students and Producers who have wanted to learn music theory to improve their own music, but have been intimidated by traditional approaches, music notation, and abstract concepts will find this book to be the answer they have been looking for. From the Author: "How music theory is usually taught is unfair. It starts with the assumption that you can read music and understand the language of classical music. My book leaves all of that behind - focusing only on the MIDI grid that producers are already familiar with to learn all the key concepts of music theory, and ultimately, make better music." This book covers all the fundamentals of music theory, but is written using the language of the DJ and Producer - the MIDI Grid. It includes "analysis" projects that look at the harmonic and melodic ideas in songs by popular producers including Zedd, Boards of Canada, Daft Punk, Deadmau5, Bonobo, Richie Hawtin, Moby, Skrillex, and Aphex Twin. Praise for Music Theory for Electronic Music Producers: "Aspiring electronic musicians have choices to make when it concerns their own education and training. This text makes one choice much easier: start here and get learning, quickly. Grounded and easygoing, the book uses real-world examples to help you make sense of music's inner worksings while steering clear of dense theories." - Michael J. Ethen, PhD Musicologist "This book knocks the oftentimes alienating world of music theory completely onto it's side. Difficult to explain concepts are perfectly demonstrated for the aspiring electronic music producer who might have no formal music training. A must have for all aspiring producers." - James Patrick (DJ, Producer, Educator) Slam Academy, Dubspot, IPR, Ableton Certified Trainer "With Music Theory for Electronic Music Producers, Dr. Allen has produced a remarkable resource: an extensive tour of musical theory that leverages some of our favorite modern tools - the virtual studio and it's piano roll note display. By introducing us to the "why" as well as the "what" of music theory, this book helps us to understand what makes music tick and how to improve our own work. In addition to offering a sound theoretical foundation, the deep dives into analyzing tracks by Skrillex, Aphex Twin, and Deadmau5 keeps our attention focused on real-world production. MTEMP will definitely go on the top of my recommendation list for anyone that needs a fresh view of musical concepts." - Darwin Grosse Director of Education, Cycling '74

This book represents a new approach to musical creativity, dealing with the semiotics, mathematical principles, and software for creativity processes. After a thorough introduction, the book offers a first practical part with a detailed tutorial for students in composition and improvisation, using musical instruments and music software. The second, theoretical part deals with historical, actual, and new principles of creative processes in music, based on the results and methods developed in the first author's book Topos of Music and referring to semiotics, predicative objects, topos theory, and object-oriented concept architectures. The third part of the book details four case studies in musical creativity, including an analysis of the six variations of Beethoven's sonata op. 109, a discussion of the creative process in a CD coproduced in 2011 by the first and second authors, a recomposition of Boulez's "Structures pour deux pianos" using the Rubato software module BigBang developed by the third author, and the Escher theorem from mathematical gesture theory in music. This is both a textbook addressed to undergraduate and graduate students of music composition and improvisation, and also a state-of-the-art survey addressed to researchers in creativity studies and music technology. The book contains summaries and end-of-chapter questions, and the authors have used the book as the main reference to teach an undergraduate creativity studies program and also to teach composition. The text is supported throughout with musical score examples.

This handbook provides a cross-section of the most field-defining topics and debates in the field of computer music today. From music cognition to pedagogy, it situates computer music in the broad context of its creation and performance across the full range of issues that crop up in discourse in the field.

How a team of musicians, engineers, computer scientists, and psychologists developed computer music as an academic field and ushered in the era of digital music. In the 1960s, a team of Stanford musicians, engineers, computer scientists, and psychologists used computing in an entirely novel way: to produce and manipulate sound and create the sonic basis of new musical compositions. This group of interdisciplinary researchers at the nascent Center for Computer Research in Music and Acoustics (CCRMA, pronounced "karma") helped to develop computer music as an academic field, invent the technologies that underlie it, and usher in the age of digital music. In The Sound of Innovation, Andrew Nelson chronicles the history of CCRMA, tracing its origins in Stanford's Artificial Intelligence Laboratory through its present-day influence on Silicon Valley

and digital music groups worldwide. Nelson emphasizes CCRMA's interdisciplinarity, which stimulates creativity at the intersections of fields; its commitment to open sharing and users; and its pioneering commercial engagement. He shows that Stanford's outsized influence on the emergence of digital music came from the intertwining of these three modes, which brought together diverse supporters with different aims around a field of shared interest. Nelson thus challenges long-standing assumptions about the divisions between art and science, between the humanities and technology, and between academic research and commercial applications, showing how the story of a small group of musicians reveals substantial insights about innovation. Nelson draws on extensive archival research and dozens of interviews with digital music pioneers; the book's website provides access to original historic documents and other material.

***** CLICK THE AUTHOR NAME "CUSTOMEYES PUBLICATIONS" FOR MORE NOTEBOOKS, JOURNALS & DIARIES ***** The music lover you know and love will appreciate this awesome gift. This music notebook gives musicians a special place to write & learn new music. This matte finished musical writing pad comes complete with over 100 pages (approx. 52 sheets). It has a flexible lightweight paperback cover, which makes it lighter and easier to carry around, and comes complete with a cool & trendy cover. Dimensions: 8.5" x 11" giving plenty of space for 12 staves per page with staff lines & notation guides. This music manuscript is perfect to help: Musicians write & learn new music Composers with their music Keep track of your songs & keep them organized Noting down songs you want to learn New musicians learn new notes and practice making music And so much more... Set yourself up for success to help you reach your goals and aspirations with this cute music journal. Order yours now!

Music in ancient China was far more than entertainment. It underpinned the very fabric of society and was revered as the means by which the human, natural and divine worlds could be maintained in perfect harmony. In this fascinating book by Dr Michael Hewitt you will learn about: * The philosophy and wisdom that underpinned Ancient Chinese culture * How music was seen as an expression of the laws of the universe * The musical science that underlies music written in the present day Whether you are interested in music, history, philosophy or ancient religion, this insightful exploration of ancient Chinese music and philosophy is sure to captivate you. Dr Michael Hewitt is an author, lecturer and composer living in North Wales. He is the author of numerous books, including Music Theory For Computer Musicians, Composition For Computer Musicians, Harmony For Computer Musicians and Musical Scales Of The World.

The Digital Musician explores what it means to be a musician in the digital age. It examines musical skills, cultural awareness and artistic identity through the prism of recent technological innovations. New technologies, and especially the new digital technologies, mean that anyone can produce music without musical training. This book asks why make music? what music to make? and how do we know what is good?

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