

Harmonograph A Visual Guide To The Mathematics Of

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Making Music with Computers Bill Manaris 2014-05-19 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.

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The Oxford Handbook of Mobile Music Studies, Volume 2 Sumanth Gopinath 2014-03 The two volumes of The Oxford Handbook of Mobile Music Studies consolidate an area of scholarly inquiry that addresses how mechanical, electrical, and digital technologies and their corresponding economies of scale have rendered music and sound increasingly mobile-portable, fungible, and ubiquitous. At once a marketing term, a common mode of everyday-life performance, and an instigator of experimental aesthetics, "mobile music" opens up a space for studying the momentous transformations in the production, distribution, consumption, and experience of music and sound that took place between the late nineteenth and the early twenty-first centuries. Taken together, the two volumes cover a large swath of the world-the US, the UK, Japan, Brazil, Germany, Turkey, Mexico, France, China, Jamaica, Iraq, the Philippines, India, Sweden-and a similarly broad array of the musical and nonmusical sounds suffusing the soundscapes of mobility. Volume 2 investigates the ramifications of mobile music technologies on musical/sonic performance and aesthetics. Two core arguments are that "mobility" is not the same thing as actual "movement" and that artistic production cannot be absolutely sundered from the performances of quotidian life. The volume's chapters investigate the mobilization of frequency range by sirens and miniature speakers; sound vehicles such as boom cars, ice cream trucks, and trains; the gestural choreographies of soundwalk pieces and mundane interactions with digital media; dance music practices in laptop and iPod DJing; the imagery of iPod commercials; production practices in Turkish political music and black popular music; the aesthetics of handheld video games and chiptune music; and the mobile device as a new musical instrument and resource for musical ensembles.

Designa Adam Tetlow 2020-09-09 Have you ever stared at patterned wallpaper and wondered how it was designed? Been captivated by some priceless Celtic art? Or boggled at a beautiful Islamic pattern? Have you ever stepped back and thought about the illusion of reality your senses create for you? Or pondered the symmetries which inform your feelings of what seems right? Is there a Golden secret, revealed by nature herself, which is common to all of the traditional arts? Packed with information and exquisite illustrations by more than twelve expert authors, Designa is the ultimate sourcebook for visual artists and designers of every kind.

Where Does Sound Come From? Data & Graphs for Science Lab M. Schottenbauer 2013-04-01 In this book, readers gain access to real scientific data pertaining to the science of sound production, promoting graph-reading, comparison, contrast, and calculation skills. Graphs show data from the following scientific instruments: Gas Pressure Sensor Anemometer (Wind Speed) Dual-Range Force Sensor Sound Pressure Meter (Microphone) This book allows readers to analyze real data without purchasing expensive lab equipment. These data from musical instruments (strings, woodwinds, brass, percussion) can be used for lesson plans by teachers and parents. The musical instruments analyzed include violin, flute, clarinet, saxophone, oboe and bassoon reeds, trumpet, trombone, 5 types of recorders (garklein, sopranino, soprano, alto, tenor, and bass), xylophone, drum pad, cymbals, gong, maracas, guiro, claves, triangle, maracas, wood block, castanets, Tibetan bowl, tuning fork, and voice. Bonus Material: Graphs of data for different types of microphone setups (mono, stereo, traditional stereo, & x-y configuration), graphs of theoretically calculated harmonic waves, and selected

instrument measurement specifications are included. Plus, graphs from a simple pneumatic experiment provide contrast and context for the science of music. Notiz: Deutsch Ausgabe separat erhältlich

The Fourth Dimension: Toward a Geometry of Higher Reality Rudy Rucker 2014-08-18 One of the most talented contemporary authors of cutting-edge math and science books conducts a fascinating tour of a higher reality, the fourth dimension. Includes problems, puzzles, and 200 drawings. "Informative and mind-dazzling." — Martin Gardner.

Sing Romantic Music Romantically David Friddle 2022-06-21 This book offers a long-overdue examination of choral performance practices in the 1800s, including expressive devices, pronunciation, instruments, and choral/orchestral placement. More than one-hundred musical examples, illustrations, tables, and photographs and contemporaneous sources detail how choral music was sung in this time period.

Harmonic Vibrations and Vibration Figures Joseph Goold 1909

On Musical Self-similarity 2011

Fibonacci Analysis Constance Brown 2010-05-13 Only someone who is both a successful trader and a successful writer could pull off what Constance Brown has accomplished in this book: distilling Fibonacci analysis to two hundred or so comprehensive, clearly written, eminently practical pages. Brown knows exactly what a professional trying to come up to speed on a new trading tool needs and she provides it, covering what Fibonacci analysis is, how it works, where it comes from, pitfalls and dangers, and, of course, how to use it. Basic trading strategies are touched upon in virtually every chapter. Fibonacci analysis is one of the most popular technical analysis tools, yet it is often used incorrectly. Brown quickly clears up common misconceptions and moves on to show, step by step, the correct way to apply the technique in any market. Those with Fibonacci analysis software will learn how to use it with maximum effectiveness; those without will chart the market the old-fashioned way. All will find answers to the trader's most important questions: Where is the market going? At what level should my stop be entered? Based on the size of my trading account, how much should I leverage into a trading position? Can I tell if I am in trouble before my stop is hit? How much should I buy or sell if given a second or third opportunity? Occasional references to other tools--including Elliott Wave, W.D. Gann, and candlestick charts--and an extensive bibliography make this book richer for accomplished technical analysts without confounding the less experienced. Plentiful real-life examples and dozens of carefully annotated charts insure every reader will get maximum value from every minute spent with this book. Gold Medal Winner (tie), Investing Category, Axiom Business Book Awards (2009) Winner: Book Series Cover Design, The Bookbinders Guild of New York/2009 New York Book Show Awards

Math and Music Trudi Hammel Garland 1994-01 From the beat of a tribal drum to a choir of crickets--music is everywhere. Math and Music explores the music of various cultures and the sounds heard in nature while highlighting the mathematical concepts, such as proportion, patterns, Fibonacci numbers, geometric transformations, and trigonometry, found in music. The companion poster explores mysterious connections between seemingly different entities, such as music and animals! A four-page guide explains the connections students may discover.

Snake Charming - The Musical Python Iain Gray 2017-09-21 This book is an innovative introduction to Python and its audio-visual capabilities for beginning programmers; a resource for expert programmers and of interest to anyone involved in music. It is structured around four extensible, audio-

visual projects on music and sound. The beginner will appreciate the 'need to know' basis of the presentation of Python for each project, and expert programmers will be able to go straight to the project code, run it and then extend it as they see fit. Musically interested readers will enjoy the historical and theoretical material at the beginning of each project, and it may even tempt them to try some coding - it is not too difficult! The four projects the book focuses on are all self-contained, but can be extended to incorporate aspects of the others. Above all this book is suited for self-study, which should be playful (pun intended!).

Quadrivium John Martineau 2010 Composed of six previously published works.

Guitar Chords Wheel Scott Gentry 2020-10-27 This easy-to-use visual guide includes every chord you can imagine! An essential tool in any guitarist's case, this portable book helps you learn positions for each finger on the fretboard and offers chord substitutions for songwriting. The key references are also a great way to come up with a base for solos! This book contains every permutation of each chord, including alternate voicings and inversions. So spin the wheel and watch your guitar playing improve!

The Venus Blueprint Richard Merrick 2012-05-22 In 2010, Richard Merrick took a family trip to Scotland's Rosslyn chapel—the enigmatic fifteenth-century temple made famous by Dan Brown's *The Da Vinci Code*. Little did he know he was about to embark upon an intellectual and personal journey that would lead to the discovery of a real-life lost symbol—one that reveals the connection between the world's most sacred temples and opens up a treasure trove of lost science and ancient secrets. The symbol he discovers—the Venus Blueprint—is based on that planet's orbital pattern, which takes the shape of a five-pointed star when seen from Earth. As Merrick digs deeper, he realizes the Venus Blueprint was an integral part of the design template of some of the most significant religious architecture around the world—including St. Peter's Basilica in the Vatican, the Roman Pantheon, the Greek Parthenon, the Temple of Jerusalem, and the Great Pyramid of Giza, as well as many buildings designed by the secretive Freemason society. Upon further examination, Merrick is astounded to discover that temples designed using the Venus Blueprint are endowed with extraordinary acoustics that, when supplied with the right tones and frequencies, are capable of harmonizing with Earth's resonant frequencies and evoking altered states of consciousness. He then proposes a fascinating idea: Could it be that the ancients used these harmonics to enhanceentheogenically induced visions—to commune with the divine and liberate the gods within? Supported by an impressive array of historical research and scientific analysis, *The Venus Blueprint* offers compelling evidence of an ancient lost culture that was both spiritually and scientifically advanced.

The Miracle of Trees Olavi Huikari 2012-10-16 A charming pocket guide to the most majestic of Earth's life forms.

Harmonograph Anthony Ashton 2003-04-01 Ashton presents a short, illustrated introduction to the evolution of simple harmonic theory. Illustrations.

The Pythagorean Theorem Eli Maor 2019-11-19 An exploration of one of the most celebrated and well-known theorems in mathematics. By any measure, the Pythagorean theorem is the most famous statement in all of mathematics. In this book, Eli Maor reveals the full story of this ubiquitous geometric theorem. Although attributed to Pythagoras, the theorem was known to the Babylonians more than a thousand years earlier. Pythagoras may have been the first to prove it, but his proof—if indeed he had one—is lost to us. The theorem itself, however, is central to almost every branch of science, pure or applied. Maor brings to life many of the characters that played a role in its history, providing a

fascinating backdrop to perhaps our oldest enduring mathematical legacy.

Music by the Numbers Eli Maor 2020-03-10 How music has influenced mathematics, physics, and astronomy from ancient Greece to the twentieth century Music is filled with mathematical elements. The works of Bach are often said to possess a math-like logic, and Arnold Schoenberg, Iannis Xenakis, and Karlheinz Stockhausen wrote music explicitly based on mathematical principles. Yet Eli Maor argues that it is music that has had the greater influence on mathematics, not the other way around. Starting with Pythagoras, proceeding through Schoenberg, and bringing the story up to the present with contemporary string theory, *Music by the Numbers* tells a fascinating story of composers, scientists, inventors, and eccentrics who have played a role in the age-old relationship between music, mathematics, and the physical sciences. Weaving compelling stories of historical episodes with Maor's personal reflections as a mathematician and lover of classical music, this book will delight anyone who loves math and music.

Energy Medicine Technologies Finley Eversole 2013-05-20 New and suppressed breakthroughs in energy medicine, ways to combat toxins and electromagnetic fields, and the importance of non-GMO foods • Explores the use of microcrystals, ozone and hydrogen peroxide therapy, and how to tap in to healing antioxidant electrons from the Earth • Reveals the scientifically proven health risks of genetically modified foods • Examines the suppressed cancer-curing electromedicine of Royal Raymond Rife and Nobel laureate Albert Szent-Györgi Natural, nontoxic, inexpensive, and effective alternatives to conventional medicine exist, yet they have been suppressed by the profit-driven medical-pharmaceutical complex. Presenting a compendium of some of the most revolutionary yet still widely unknown discoveries in health and energy medicine, this book edited by Finley Eversole, Ph.D., explores the use of microcrystals to harmonize the energies of body, mind, and environment; the healing effects of ozone and hydrogen peroxide therapy; ways to combat electromagnetic fields and environmental toxins; sources of disruptive energy that cause stress and health problems, including other people's negative emotions; and how to tap in to healing antioxidant electrons from the Earth. The book reveals the scientifically proven health risks of genetically modified foods--the first irreversible technology in human history with still unknown consequences. It looks at the link between industrial farming and the precipitous rise in heart disease, cancer, diabetes, and Alzheimer's over the past 100 years, providing a 10-point Low-Toxin Program to reduce your risk. It explores the cancer-curing electromedicine of Royal Raymond Rife and its suppression by the medical establishment as well as Nobel laureate Albert Szent-Györgi's follow-up discovery of Frequency Therapy. Offering a window into the holistic future of medicine, the book shows the body not simply as a biological machine to be patched and repaired but as a living organism made up of cells dynamically linked to their inner and outer environments.

Symmetry David Wade 2006-10-17 As much of interest to mathematicians as it is to artists, as relevant to physics as to architecture, symmetry underlies almost every aspect of nature and our experience of the world. Illustrated with old engravings and original work by the author, this book moves from church windows and mirror reflections to the deepest ideas of hidden symmetries in physics and geometry, music and the arts, left- and right-handedness.

The Elements of Music Jason Martineau 2008-10-28 This innovative book presents the elements of music by building upon the long-known fundamentals of acoustics, proportion and relationship--a kind of musical metaphor. In combination with novel graphics and symbols, the principles behind melody, rhythm, and harmony come alive, along with those of Western musical notation.

Numbers at Work Rudolf Taschner 2007-05-31 Drawing primarily from historical examples, this book

explains the tremendous role that numbers and, in particular, mathematics play in all aspects of our civilization and culture. The lively style and illustrative examples will engage the reader who wants to understand the many ways in which mathematics enables science, technology, art, music, politics, and rational foundations of human thought. Each chapter focuses on the influence of mathematics in a specific field and on a specific historical figure, such as "Pythagoras: Numbers and Symbol"; "Bach: Numbers and Music"; "Descartes: Numbers and Space."

Harmonograph Anthony Ashton 2018-04-01 Why did Pythagoras pause outside a Blacksmith's workshop? Can the nature of Harmony really be understood visually? Why do harmonies leave gaps or 'commas' when added together? In this charming little book Anthony Ashton uses a Victorian device called a Harmonograph to tell the story of Harmony and the intervals in the scale. With useful appendices and exquisite line drawings this is a unique and original introduction to this timeless subject. WOODEN BOOKS are small but packed with information. "e;Fascinating"e; FINANCIAL TIMES. "e;Beautiful"e; LONDON REVIEW OF BOOKS. "e;Rich and Artful"e; THE LANCET. "e;Genuinely mind-expanding"e; FORTEAN TIMES. "e;Excellent"e; NEW SCIENTIST. "e;Stunning"e; NEW YORK TIMES. Small books, big ideas.

The Math Behind the Music Leon Harkleroad 2006-08-14 Looks at the mathematical aspects of music, covering such topics as compositional techniques, scales, tuning systems, and music criticism.

The Daily Show (The Book) Chris Smith 2016-11-22 NEW YORK TIMES BESTSELLER The complete, uncensored history of the award-winning The Daily Show with Jon Stewart, as told by its correspondents, writers, and host. For almost seventeen years, The Daily Show with Jon Stewart brilliantly redefined the borders between television comedy, political satire, and opinionated news coverage. It launched the careers of some of today's most significant comedians, highlighted the hypocrisies of the powerful, and garnered 23 Emmys. Now the show's behind-the-scenes gags, controversies, and camaraderie will be chronicled by the players themselves, from legendary host Jon Stewart to the star cast members and writers-including Samantha Bee, Stephen Colbert, John Oliver, and Steve Carell - plus some of The Daily Show's most prominent guests and adversaries: John and Cindy McCain, Glenn Beck, Tucker Carlson, and many more. This oral history takes the reader behind the curtain for all the show's highlights, from its origins as Comedy Central's underdog late-night program to Trevor Noah's succession, rising from a scrappy jester in the 24-hour political news cycle to become part of the beating heart of politics-a trusted source for not only comedy but also commentary, with a reputation for calling bullshit and an ability to effect real change in the world. Through years of incisive election coverage, passionate debates with President Obama and Hillary Clinton, feuds with Bill O'Reilly and Fox, and provocative takes on Wall Street and racism, The Daily Show has been a cultural touchstone. Now, for the first time, the people behind the show's seminal moments come together to share their memories of the last-minute rewrites, improvisations, pranks, romances, blow-ups, and moments of Zen both on and off the set of one of America's most groundbreaking shows.

Quadrivium John Martineau 2020-08-08 The Quadrivium consists of the four Liberal Arts of Number, Geometry, Music, and Cosmology, studied from antiquity to the Renaissance as a way of glimpsing the nature of reality. They synthesize number, space, and time. Geometry is number in space, music is number in time, and the cosmos expresses number in space and time. Number, music, and geometry are metaphysical truths, good and beautiful everywhere at all times. Life across the universe investigates them. They foreshadow the physical sciences. This is the first volume to bring together the Quadrivium for many hundreds of years

The Alchemist's Kitchen Guy Ogilvy 2006-10-17 Initiates the reader into some of the key concepts and practices of this extraordinary field of study.

Li David Wade 2003-04-01 A short, illustrated introduction to Li, the sister science to Feng Shui, the study of naturally occurring shapes and patterns. Illustrations.

Music in the Human Experience Donald A. Hodges 2019-10-07 *Music in the Human Experience: An Introduction to Music Psychology, Second Edition*, is geared toward music students yet incorporates other disciplines to provide an explanation for why and how we make sense of music and respond to it—cognitively, physically, and emotionally. All human societies in every corner of the globe engage in music. Taken collectively, these musical experiences are widely varied and hugely complex affairs. How did human beings come to be musical creatures? How and why do our bodies respond to music? Why do people have emotional responses to music? *Music in the Human Experience* seeks to understand and explain these phenomena at the core of what it means to be a human being. New to this edition: Expanded references and examples of non-Western musical styles Updated literature on philosophical and spiritual issues Brief sections on tuning systems and the acoustics of musical instruments A section on creativity and improvisation in the discussion of musical performance New studies in musical genetics Greatly increased usage of explanatory figures

Solomon's Angels Doreen Virtue 2009-06 In *Virtues* first novel, which is based on thoroughly researched historical, biblical, archaeological, and culturally accurate information, readers see how the meeting between King Solomon and Makeda, the Queen of Sheba, changed both of their lives forever.

Dust & Grooves Eilon Paz 2015-09-15 A photographic look into the world of vinyl record collectors—including Questlove—in the most intimate of environments—their record rooms. Compelling photographic essays from photographer Eilon Paz are paired with in-depth and insightful interviews to illustrate what motivates these collectors to keep digging for more records. The reader gets an up close and personal look at a variety of well-known vinyl champions, including Gilles Peterson and King Britt, as well as a glimpse into the collections of known and unknown DJs, producers, record dealers, and everyday enthusiasts. Driven by his love for vinyl records, Paz takes us on a five-year journey unearthing the very soul of the vinyl community.

Music and Mathematics John Fauvel 2006 From Ancient Greek times, music has been seen as a mathematical art, and this relationship has fascinated generations. This new in paperback edition of diverse, comprehensive and fully-illustrated papers, authored by leading scholars, links the two fields in a lucid manner that is suitable for students of each subject as well as the general reader.

Where Does Sound Come From? Data and Graphs for Science Lab: M. Schottenbauer 2013-04-01 In this book, readers gain access to real scientific data pertaining to the science of sound production, promoting graph-reading, comparison, contrast, and calculation skills. Graphs show data from the following scientific instruments: Sound Level Meter Tuner This book allows readers to analyze real data without purchasing expensive lab equipment. These data from musical instruments (strings, woodwinds, brass, percussion) can be used for lesson plans by teachers and parents. The musical instruments in this book include violin, flute, clarinet, saxophone, oboe and bassoon reeds, trumpet, trombone, 5 types of recorders (garklein, sopranino, soprano, alto, tenor, and bass), xylophone, drum pad, cymbals, gong, maracas, guiro, claves, triangle, maracas, wood block, castanets, Tibetan bowl, tuning fork, and voice. Bonus Material: Charts comparing tuning systems, instructions on calculating frequencies for different notes and scales, and derivation of the power series underlying just intonation tuning and scales are

included. Pictures of the scientific instruments and musical instruments used in Volumes 1 and 2, sample setup pictures and discussion questions regarding laboratory equipment, and pictures of a comparison hydraulic experiment are also included. Notiz: Deutsch Ausgabe separat erhältlich

Inventions in Music Lisa Hiton 2016-12-15 Music's roots begin at the dawn of humanity, when the earliest humans used rudimentary sounds to communicate for survival. *Inventions in Music: From the Monochord to MP3s* traces the evolution of music through technologies that shaped the medium: the monochord, the phonograph, magnetic tape, and MP3 files. The book describes these inventions in chronological order, considers their influence on one another, and examines these innovations' impact beyond music.

Understanding Pendulums L.P. Pook 2011-05-27 Despite their apparent simplicity, the behaviour of pendulums can be remarkably complicated. Historically, pendulums for specific purposes have been developed using a combination of simplified theory and trial and error. There do not appear to be any introductory books on pendulums, written at an intermediate level, and covering a wide range of topics. This book aims to fill the gap. It is written for readers with some background in elementary geometry, algebra, trigonometry and calculus. Historical information, where available and useful for the understanding of various types of pendulum and their applications, is included. Perhaps the best known use of pendulums is as the basis of clocks in which a pendulum controls the rate at which the clock runs. Interest in theoretical and practical aspects of pendulums, as applied to clocks, goes back more than four centuries. The concept of simple pendulums, which are idealised versions of real pendulums is introduced. The application of pendulums to clocks is described, with detailed discussion of the effect of inevitable differences between real pendulums and simple pendulums. In a clock, the objective is to ensure that the pendulum controls the timekeeping. However, pendulums are sometimes driven, and how this affects their behaviour is described. Pendulums are sometimes used for occult purposes. It is possible to explain some apparently occult results by using modern pendulum theory. For example, why a ring suspended inside a wine glass, by a thread from a finger, eventually strikes the glass. Pendulums have a wide range of uses in scientific instruments, engineering, and entertainment. Some examples are given as case studies. Indexed in the Book Citation Index- Science (BKCI-S)

Ruler and Compass Andrew Sutton 2009-10-27 An introduction to geometry without measurements.

Perspective and Other Optical Illusions Phoebe McNaughten 2018-04-01 Do things always look smaller when they are further away? Can something be clearly visible but not there at all? Is it ever possible to have a direct and true experience of reality? Are you sure? In this delightful and informative little book Phoebe McNaughten takes us on a classical journey through the history of artistic perspective, showing how the eye can be tricked and confused, the brain befuddled, and the philosopher inside all of us awakened by the nature of illusion. WOODEN BOOKS are small but packed with information. "e;Fascinating"e; FINANCIAL TIMES. "e;Beautiful"e; LONDON REVIEW OF BOOKS. "e;Rich and Artful"e; THE LANCET. "e;Genuinely mind-expanding"e; FORTEAN TIMES. "e;Excellent"e; NEW SCIENTIST. "e;Stunning"e; NEW YORK TIMES. Small books, big ideas.

Math Adventures with Python Peter Farrell 2019-01-08 Learn math by getting creative with code! Use the Python programming language to transform learning high school-level math topics like algebra, geometry, trigonometry, and calculus! *Math Adventures with Python* will show you how to harness the power of programming to keep math relevant and fun. With the aid of the Python programming language, you'll learn how to visualize solutions to a range of math problems as you use code to explore

key mathematical concepts like algebra, trigonometry, matrices, and cellular automata. Once you've learned the programming basics like loops and variables, you'll write your own programs to solve equations quickly, make cool things like an interactive rainbow grid, and automate tedious tasks like factoring numbers and finding square roots. You'll learn how to write functions to draw and manipulate shapes, create oscillating sine waves, and solve equations graphically. You'll also learn how to: - Draw and transform 2D and 3D graphics with matrices - Make colorful designs like the Mandelbrot and Julia sets with complex numbers - Use recursion to create fractals like the Koch snowflake and the Sierpinski triangle - Generate virtual sheep that graze on grass and multiply autonomously - Crack secret codes using genetic algorithms As you work through the book's numerous examples and increasingly challenging exercises, you'll code your own solutions, create beautiful visualizations, and see just how much more fun math can be!

The Geometry of Musical Rhythm Godfried T. Toussaint 2016-04-19 *The Geometry of Musical Rhythm: What Makes a "Good" Rhythm Good?* is the first book to provide a systematic and accessible computational geometric analysis of the musical rhythms of the world. It explains how the study of the mathematical properties of musical rhythm generates common mathematical problems that arise in a variety of seemingly dispa