The Hitchhikers Guide To Calculus

Into the WildProfessional PythonThe Complete Idiot's Guide to CalculusThe Art of the InfiniteLife, the Universe and EverythingA Doubter's Guide to the BibleIntroduction to Artificial IntelligenceChemical Ecology of Insect ParasitoidsBiostatistics with RFundamentals of Mathematical LogicFreakonomicsSag HarborMath Adventures with PythonComplex AnalysisA Handbook of Integer SequencesGradient FlowsComplex AnalysisUltimate Paranormal GuideBioinformatics ComputingOut Of ControlPerpetuating TroubleElements of MathematicsSchaum's Outline of Probability and Statistics, 4th EditionWell That About Wraps It Up For GodThe Hitchhiker's Guide to Calculus3D Math Primer for Graphics and Game DevelopmentInfinite Dimensional AnalysisA Brief History of InfinityA Tour of the CalculusThis Is How You Lose HerThe Hitchhiker's Guide to PythonTeaching and Learning Secondary School MathematicsThe Last HumanStarfishA Hitchhiker's Guide to Virtual RealityA History of Chinese MathematicsPlague Ship (SF Classic)Crew OnePhilosophy and The Hitchhiker's Guide to the GalaxyBehemoth

Into the Wild

The Hitchhiker's Guide to Python takes the journeyman Pythonista to true

expertise. More than any other language, Python was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity—and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist.

Professional Python

The last human in the universe must battle unfathomable alien intelligences—and confront the truth about humanity—in this ambitious, galaxy-spanning debut "A good old-fashioned space opera in a thoroughly fresh package."—Andy Weir, author of The Martian "Big ideas and believable science amid a roller-coaster ride of aliens, AI, superintelligence, and the future of humanity."—Dennis E. Taylor, author of We Are Legion Most days, Sarya doesn't feel like the most terrifying creature in the galaxy. Most days, she's got other things on her mind. Like hiding her identity among the hundreds of alien species roaming the corridors of Watertower Station. Or making sure her adoptive mother doesn't casually eviscerate one of their neighbors. Again. And most days, she can almost accept that she'll never know the truth—that she'll never know why humanity was

deemed too dangerous to exist. Or whether she really is—impossibly—the lone survivor of a species destroyed a millennium ago. That is, until an encounter with a bounty hunter and a miles-long kinetic projectile leaves her life and her perspective shattered. Thrown into the universe at the helm of a stolen ship—with the dubious assistance of a rebellious spacesuit, an android death enthusiast on his sixtieth lifetime, and a ball of fluff with an IQ in the thousands—Sarya begins to uncover an impossible truth. What if humanity's death and her own existence are simply two moves in a demented cosmic game, one played out by vast alien intellects? Stranger still, what if these mad gods are offering Sarya a seat at their table—and a second chance for humanity? The Last Human is a sneakily brilliant, gleefully oddball space-opera debut—a masterful play on perspective, intelligence, and free will, wrapped in a rollicking journey through a strange and crowded galaxy.

The Complete Idiot's Guide to Calculus

Presents a collection of stories that explores the heartbreak and radiance of love as it is shaped by passion, betrayal, and the echoes of intimacy.

The Art of the Infinite

Insect parasitoids are a fascinating group of animals in manyrespects. Perhaps the most fascinating point is that these insects,in the course of the evolutionary time, have developed animpressive way to use chemical compounds to dialogue with thedifferent protagonists of their environment (i.e.,conspecifics, their hosts and the plants on which their hosts areliving). Unravelling the evolutionary meaning of such chemicalcommunication networks can give new insights into the ecology ofthese insects and especially on how to improve their use for thecontrol of noxious pests in biological control programmes. Chemical Ecology of Insect Parasitoids is a timelypublication, with organised chapters to present the most importantknowledge and discoveries that have taken place over the lastdecade, and their potential use in pest control strategy.Specific relevant case studies are presented to enhance thereader's experience. Suited to graduate students and professional researchers andpractitioners in pest management, entomology, evolutionary biology,behavioural ecology, and chemical ecology, this book is essentialfor anyone needing information on this important group ofinsects.

Life, the Universe and Everything

A Doubter's Guide to the Bible

A Hitchhiker's Guide to Virtual Reality brings together under one cover all the aspects of graphics, video, audio, and haptics that have to work together to make virtual reality a reality. Like any good guide, it reveals the practical things you need to know, from the viewpoint of authors who have been there. This two-part guide covers the science, technology, and mathematics of virtual reality and then details its practical implementation. The first part looks at how the interface between human senses and technology works to create virtual reality, with a focus on vision, the most important sense in virtual reality. The second part of the book is tightly integrated with an accompanying CD, which contains the programs for more than 30 virtual reality projects, ranging in scope from a tool that simulates virtual sculpting to a suite of software for the control of a four-projector immersive virtual environment.

Introduction to Artificial Intelligence

Thesis (M.A.) from the year 2007 in the subject English Language and Literature Studies - Literature, grade: 1,3, University of Leipzig, 125 entries in the bibliography, language: English, abstract: "There are of course many problems connected with life, of which some of the most popular are: Why are people born? Why do they die? Why do they want to spend so much of the intervening time wearing digital watches?" (Hitch: 139; emph. by Adams) The Trilogy in Five Parts is the story of Arthur Dent and his quest for the answers to these problems. After the

destruction of Earth the only surviving Englishman Dent hitchhikes through the width of time and space, finds out the answer to the ultimate question, dines at the Restaurant at the End of the Universe, saves the world, falls in love with a woman whose feet cannot touch the ground, is worshipped by birds and sandwich-lovers, is enlightened by God's final message to His Creation and finally meets his fate on STAVROMULABETA. It is the aim of this thesis to analyse appearances of religious motives, ideas or traditions in the five novels that belong to the HG-trilogy and to interpret their function in the works.

Chemical Ecology of Insect Parasitoids

Today the entire world is at our fingertips, not too long ago libraries, and the knowledge inside books were our only source. Now we can carry the entire library, and more in a tablet lighter, and smaller than a single book. We have the tendency to rely entirely on our computers as our only source of knowledge; we take for granted that there will be electrical power as needed, and spoiled by the ease and availability of Wi-Fi or Wi-MAX wherever we go connecting our devices to the world. While doing research in the field, we are sometimes at locations where power is at a premium, or does not exist at all; then you have questionable or unreliable cellphone service without reliable power those devices are useless, and inevitably start to shut down. In these situations its time to break out the pencil and paper. This book contains paranormal terminology from different fields, historical facts,

people and events for research and educational purposes. ISR created this book as a handy quick pocket reference guide when doing research in the field. If you needed one book to take with you that would come in handy in the middle of nowhere, this would be that book.

Biostatistics with R

Dear Reader…have you ever wished you could earn a living by making stuff up? Have you ever fantasized about living the life of a writer? If so, PERPETUATING TROUBLE is the humorous cautionary tale you need to read. "I avoided writers very carefully because they can perpetuate trouble as no one else can," wrote F. Scott Fitzgerald. In this memoir, novelist Chris Orcutt shows how true this is. Debunking the myths, Orcutt reveals that the writing life is really one of crushing solitude, chronic dissatisfaction, mood swings and self-doubt, and where successes, when they come, are like diner mints—sweet, but short-lived. And everyday life is equally stressful, with callous urologists, curmudgeonly painters, flirtatious receptionists, personal feuds and petty thefts. For the writer, all of this leads to one thing—perpetual trouble. Yet, Orcutt's deep love of language, his saintly wife, and his indomitable sense of humor keep him going. Whether picking up two female hitchhikers who later turn out to be aliens from another planet, or divesting himself of a hoard of tacky paintings, or using philosophy to get out of a traffic ticket, Orcutt finds the humor and the art in his trials. It's also a life of love and sadness,

as he recounts a whirlwind love affair with a ravishing redhead, and the death of his beloved writing companion, his cat. In the end, Orcutt discovers that to be a writer, he must be part adventurer, crusader, humorist, lover, philosopher, and, of course, troublemaker. PERPETUATING TROUBLE is Orcutt's tenth book, and by far his most personal work to date.

Fundamentals of Mathematical Logic

This is a very successful textbook for undergraduate students of pure mathematics. Students often find the subject of complex analysis very difficult. Here the authors, who are experienced and well-known expositors, avoid many of such difficulties by using two principles: (1) generalising concepts familiar from real analysis; (2) adopting an approach which exhibits and makes use of the rich geometrical structure of the subject. An opening chapter provides a brief history of complex analysis which sets it in context and provides motivation.

Freakonomics

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!

Sag Harbor

Which is more dangerous, a gun or a swimming pool? What do schoolteachers and sumo wrestlers have in common? How much do parents really matter? These may not sound like typical questions for an economist to ask. But Steven D. Levitt is not

a typical economist. He studies the riddles of everyday life--from cheating and crime to parenting and sports--and reaches conclusions that turn conventional wisdom on its head. Freakonomics is a groundbreaking collaboration between Levitt and Stephen J. Dubner, an award-winning author and journalist. They set out to explore the inner workings of a crack gang, the truth about real estate agents, the secrets of the Ku Klux Klan, and much more. Through forceful storytelling and wry insight, they show that economics is, at root, the study of incentives--how people get what they want or need, especially when other people want or need the same thing.

Math Adventures with Python

This eBook edition has been formatted to the highest digital standards and adjusted for readability on all devices. Plague Ship follows the adventures of Dane Thorson, a Cargo-master-apprentice on the Free Trader rocket ship the Solar Queen. Free Traders take on trading contracts on remote and recently discovered planets, which can be dangerous and unpredictable. The Solar Queen has recently obtained a valuable trading contract on the planet Sargol and are building a relationship with one of the races on the planet, the cat-like Salariki. The process goes slowly till the Salariki discover that the Solar Queen is carrying catnip and other plants from Terra that are unknown on Sargol. The traders exchange what little of the plants they have for the rare and valuable Koros stones and collect a

native red-colored wood to exchange at home. A few days after leaving the planet, several members of the crew suffer from attacks, which start with severe headaches and end in a semi-coma state. Only 4 of the younger members of the crew are unaffected, including Dane Thorson. Upon exiting hyperspace on return to the vicinity of Terra, the crew discovers that they are pariah and have been declared a plague ship.

Complex Analysis

A Handbook of Integer Sequences contains a main table of 2300 sequences of integers that are collected from all branches of mathematics and science. This handbook describes how to use the main table and provides methods for analyzing and describing unknown and important sequences. This compilation also serves as an index to the literature for locating references on a particular problem and quickly finds numbers such as 712, number of partitions of 30, 18th Catalan number, or expansion of ? to 60 decimal places. Other topics include the method of differences, self-generating sequences, polyominoes, permutations, and puzzle sequences. This publication is a good source for students and researchers who are confronted with strange and important sequences.

A Handbook of Integer Sequences

A study-guide to probability and statistics that includes coverage of course concepts and 897 fully solved problems.

Gradient Flows

The Hitchhiker's Guide to Calculus begins with a rapid view of lines and slope. Spivak then takes up non-linear functions and trigonometric functions. He places the magnifying glass on curves in the next chapter and effortlessly leads the reader to the idea of derivative. In the next chapter he tackles speed and velocity, followed by the derivative of sine. Maxima and minima are next. Rolle's theorem and the MVT form the core of Chapter 11, "Watching Experts at Play." The Hitchhiker's Guide to Calculus closes with a chapter on the integral, the fundamental theorem, and applications of the integral.

Complex Analysis

This book is made up of two parts, the first devoted to general, historical and cultural background, and the second to the development of each subdiscipline that together comprise Chinese mathematics. The book is uniquely accessible, both as a topical reference work, and also as an overview that can be read and reread at many levels of sophistication by both sinologists and mathematicians alike.

Ultimate Paranormal Guide

The book is devoted to the theory of gradient flows in the general framework of metric spaces, and in the more specific setting of the space of probability measures, which provide a surprising link between optimal transportation theory and many evolutionary PDE's related to (non)linear diffusion. Particular emphasis is given to the convergence of the implicit time discretization method and to the error estimates for this discretization, extending the well established theory in Hilbert spaces. The book is split in two main parts that can be read independently of each other.

Bioinformatics Computing

This introductory graduate text covers modern mathematical logic from propositional, first-order and infinitary logic and Gödel's Incompleteness Theorems to extensive introductions to set theory, model theory and recursion (computability) theory. Based on the author's more than 35 years of teaching experience, the book develops students' intuition by presenting complex ideas in the simplest context for which they make sense. The book is appropriate for use as a classroom text, for self-study, and as a reference on the state of modern logic.

Out Of Control

In April 1992 a young man from a well-to-do family hitchhiked to Alaska and walked alone into the wilderness north of Mt. McKinley. His name was Christopher Johnson McCandless. He had given $25,000 in savings to charity, abandoned his car and most of his possessions, burned all the cash in his wallet, and invented a new life for himself. Four months later, his decomposed body was found by a moose hunter. How McCandless came to die is the unforgettable story of Into the Wild. Immediately after graduating from college in 1991, McCandless had roamed through the West and Southwest on a vision quest like those made by his heroes Jack London and John Muir. In the Mojave Desert he abandoned his car, stripped it of its license plates, and burned all of his cash. He would give himself a new name, Alexander Supertramp, and , unencumbered by money and belongings, he would be free to wallow in the raw, unfiltered experiences that nature presented. Craving a blank spot on the map, McCandless simply threw the maps away. Leaving behind his desperate parents and sister, he vanished into the wild. Jon Krakauer constructs a clarifying prism through which he reassembles the disquieting facts of McCandless's short life. Admitting an interst that borders on obsession, he searches for the clues to the dries and desires that propelled McCandless. Digging deeply, he takes an inherently compelling mystery and unravels the larger riddles it holds: the profound pull of the American wilderness on our imagination; the allure of high-risk activities to young men of a certain cast of mind; the complex,

charged bond between fathers and sons. When McCandless's innocent mistakes turn out to be irreversible and fatal, he becomes the stuff of tabloid headlines and is dismissed for his naiveté, pretensions, and hubris. He is said to have had a death wish but wanting to die is a very different thing from being compelled to look over the edge. Krakauer brings McCandless's uncompromising pilgrimage out of the shadows, and the peril, adversity , and renunciation sought by this enigmatic young man are illuminated with a rare understanding--and not an ounce of sentimentality. Mesmerizing, heartbreaking, Into the Wild is a tour de force. The power and luminosity of Jon Krakauer's stoytelling blaze through every page. From the Trade Paperback edition.

Perpetuating Trouble

"Wild satire . . . The feckless protagonist, Arthur Dent, is reminiscent of Vonnegut heroes."—Chicago Tribune The unhappy inhabitants of planet Krikkit are sick of looking at the night sky above their heads—so they plan to destroy it. The universe, that is. Now only five individuals stand between the killer robots of Krikkit and their goal oftotal annihilation. They are Arthur Dent, a mild-mannered space and time traveler who tries to learn how to fly by throwing himself at the ground and missing; Ford Prefect, his best friend, who decides to go insane to see if he likes it; Slartibartfast, the indomitable vice president of the Campaign for Real Time, who travels in a ship powered by irrational behavior; Zaphod Beeblebrox, the

two-headed, three-armed ex-president of the galaxy; and Trillian, the sexy space cadet who is torn between a persistent Thunder God and a very depressed Beeblebrox. How will it all end? Will it end? Only this stalwart crew knows as they try to avert "universal" Armageddon and save life as we know it—and don't know it! "Adams is one of those rare treasures: an author who, one senses, has as much fun writing as one has reading."—Arizona Daily Star

Elements of Mathematics

Master the secret tools every Python programmer needs to know Professional Python goes beyond the basics to teach beginner- and intermediate-level Python programmers the little-known tools and constructs that build concise, maintainable code. Design better architecture and write easy-to-understand code using highly adoptable techniques that result in more robust and efficient applications. Coverage includes Decorators, Context Managers, Magic Methods, Class Factories, Metaclasses, Regular Expressions, and more, including advanced methods for unit testing using asyncio and CLI tools. Each topic includes an explanation of the concept and a discussion on applications, followed by hands-on tutorials based on real-world scenarios. The "Python 3 first" approach covers multiple current versions, while ensuring long-term relevance. Python offers many tools and techniques for writing better code, but often confusing documentation leaves many programmers in the dark about how to use them. This book shines a light on these

incredibly useful methods, giving you clear guidance toward building stronger applications. Learn advanced Python functions, classes, and libraries Utilize better development and testing tools Understand the "what," "when," "why," and "how" More than just theory or a recipe-style walk-through, this guide helps you learn — and understand — these little-known tools and techniques. You'll streamline your workflow while improving the quality of your output, producing more robust applications with cleaner code and stronger architecture. If you're ready to take your Python skills to the next level, Professional Python is the invaluable guide that will get you there.

Schaum's Outline of Probability and Statistics, 4th Edition

Elements of Mathematics takes readers on a fascinating tour that begins in elementary mathematics—but, as John Stillwell shows, this subject is not as elementary or straightforward as one might think. Not all topics that are part of today's elementary mathematics were always considered as such, and great mathematical advances and discoveries had to occur in order for certain subjects to become "elementary." Stillwell examines elementary mathematics from a distinctive twenty-first-century viewpoint and describes not only the beauty and scope of the discipline, but also its limits. From Gaussian integers to propositional logic, Stillwell delves into arithmetic, computation, algebra, geometry, calculus, combinatorics, probability, and logic. He discusses how each area ties into more

advanced topics to build mathematics as a whole. Through a rich collection of basic principles, vivid examples, and interesting problems, Stillwell demonstrates that elementary mathematics becomes advanced with the intervention of infinity. Infinity has been observed throughout mathematical history, but the recent development of "reverse mathematics" confirms that infinity is essential for proving well-known theorems, and helps to determine the nature, contours, and borders of elementary mathematics. Elements of Mathematics gives readers, from high school students to professional mathematicians, the highlights of elementary mathematics and glimpses of the parts of math beyond its boundaries.

Well That About Wraps It Up For God

This accessible and engaging textbook presents a concise introduction to the exciting field of artificial intelligence (AI). The broad-ranging discussion covers the key subdisciplines within the field, describing practical algorithms and concrete applications in the areas of agents, logic, search, reasoning under uncertainty, machine learning, neural networks, and reinforcement learning. Fully revised and updated, this much-anticipated second edition also includes new material on deep learning. Topics and features: presents an application-focused and hands-on approach to learning, with supplementary teaching resources provided at an associated website; contains numerous study exercises and solutions, highlighted examples, definitions, theorems, and illustrative cartoons; includes chapters on

predicate logic, PROLOG, heuristic search, probabilistic reasoning, machine learning and data mining, neural networks and reinforcement learning; reports on developments in deep learning, including applications of neural networks to generate creative content such as text, music and art (NEW); examines performance evaluation of clustering algorithms, and presents two practical examples explaining Bayes' theorem and its relevance in everyday life (NEW); discusses search algorithms, analyzing the cycle check, explaining route planning for car navigation systems, and introducing Monte Carlo Tree Search (NEW); includes a section in the introduction on AI and society, discussing the implications of AI on topics such as employment and transportation (NEW). Ideal for foundation courses or modules on AI, this easy-to-read textbook offers an excellent overview of the field for students of computer science and other technical disciplines, requiring no more than a high-school level of knowledge of mathematics to understand the material.

The Hitchhiker's Guide to Calculus

Out of Control chronicles the dawn of a new era in which the machines and systems that drive our economy are so complex and autonomous as to be indistinguishable from living things.

3D Math Primer for Graphics and Game Development

Were it not for the calculus, mathematicians would have no way to describe the acceleration of a motorcycle or the effect of gravity on thrown balls and distant planets, or to prove that a man could cross a room and eventually touch the opposite wall. Just how calculus makes these things possible and in doing so finds a correspondence between real numbers and the real world is the subject of this dazzling book by a writer of extraordinary clarity and stylistic brio. Even as he initiates us into the mysteries of real numbers, functions, and limits, Berlinski explores the furthest implications of his subject, revealing how the calculus reconciles the precision of numbers with the fluidity of the changing universe. "An odd and tantalizing book by a writer who takes immense pleasure in this great mathematical tool, and tries to create it in others."--New York Times Book Review From the Trade Paperback edition.

Infinite Dimensional Analysis

Five years ago you destroyed the world. The world had it coming. So you brought back a gift from the deep sea, a doomsday microbe to throw the planet on its side. Now DNA itself is on the way out. North America lies in ruins beneath the thumb of an omnipotent psychopath. Governments across the globe have fallen; warlords

and suicide cults have risen from the ashes. All because five years ago, you had a score to settle. But you've discovered something in the meantime: you destroyed the world on false pretenses. For years now you've cowered among the mountains of the deep Atlantic. But you cannot hide forever. The consequences of past acts reach inexorably to the very bottom of the world - and suddenly, even here, there's no way to take back the body count. One way or another, you're about to face the mess you made. Watts is a Canadian science fiction author and marine-mammal biologist. His first novel Starfish was then followed with the sequels, behemoth: b-Max and behemoth: Seppuku. These comprise a trilogy usually referred to as "Rifters" after the modified humans designed to work in deep-ocean environments. Watts' novel Blindsight was nominated for a 2006 Hugo Award, and has been described by Charles Stross; "Imagine a neurobiology-obsessed version of Greg Egan writing a first contact with aliens story from the point of view of a zombie posthuman crewman aboard a starship captained by a vampire, with not dying as the boobie prize." Echopraxia, released in 2014 is a "sidequel" about events happening on Earth and elsewhere concurrent with the events in Blindsight. In addition to his novels and short stories, Watts has also worked in other media. He was peripherally involved in the early stages of the animated science fiction film and television project Strange Frame, and also worked briefly with Relic Entertainment on one of the early drafts of the story that would eventually, years later, become Homeworld 2. The creative director of Bioshock 2 has cited Watts's work as an influence on that game.

A Brief History of Infinity

The only tutor that struggling calculus students will need Aimed at those who actually need to learn calculus in order to pass the class they are in or are about to take, rather than an advanced audience.

A Tour of the Calculus

This text was born out of an advanced mathematical economics seminar at Caltech in 1989-90. We realized that the typical graduate student in mathematical economics has to be familiar with a vast amount of material that spans several traditional fields in mathematics. Much of the mate rial appears only in esoteric research monographs that are designed for specialists, not for the sort of generalist that our students need be. We hope that in a small way this text will make the material here accessible to a much broader audience. While our motivation is to present and orga nize the analytical foundations underlying modern economics and finance, this is a book of mathematics, not of economics. We mention applications to economics but present very few of them. They are there to convince economists that the material has so me relevance and to let mathematicians know that there are areas of application for these results. We feel that this text could be used for a course in analysis that would benefit math

ematicians, engineers, and scientists. Most of the material we present is available elsewhere, but is scattered throughout a variety of sources and occasionally buried in obscurity. Some of our results are original (or more likely, independent rediscoveries). We have included some material that we cannot honestly say is neces sary to understand modern economic theory, but may yet prove useful in future research.

This Is How You Lose Her

3D Math Primer for Graphics and Game Development covers fundamental 3D math concepts that are especially useful for computer game developers and programmers. The authors discuss the mathematical theory in detail and then provide the geometric interpretation necessary to make 3D math intuitive. Working C++ classes illustrate how to put the techniques into practice, and exercises at the end of each chapter help reinforce the concepts.This book explains basic concepts such as vectors, coordinate spaces, matrices, transformations, Euler angles, homogenous coordinates, geometric primitives, intersection tests, and triangle meshes. It discusses orientation in 3D, including thorough coverage of quaternions and a comparison of the advantages and disadvantages of different representation techniques. The text describes working C++ classes for mathematical and geometric entities and several different matrix classes, each tailored to specific geometric tasks. Also included are complete derivations for all the primitive

transformation matrices.

The Hitchhiker's Guide to Python

Is the Bible still an authoritative guide? Television documentaries regularly explore the "mysteries of the Bible" and question whether its stories can be supported by historical facts. A multitude of people claim the Bible's authority for their own, often competing, agendas. And for many, the church has lost credibility in light of various scandals and failures. Is it any wonder, then, that a growing number of folks doubt whether the Bible is a legitimate source of religious authority, much less the word of God? In A Doubter's Guide to the Bible, Terry Giles asks the hard questions that skeptics have about the Bible. Affirming the legitimacy of doubt in light of such questions, Giles invites us to walk with him as he explores issues such as the Bible's origins, violence in the Bible and in the modern world, and the degree to which the Bible has been used as propaganda to justify particular ends. Never ignoring the doubts that may still remain, Giles suggests that the Bible's power arises from its ability to open up a space where we can meet God, who confronts us amidst all the messiness of our humanity. Whether we've never considered these questions before--and especially if we have--A Doubter's Guide to the Bible is an essential companion on our spiritual journey.

Teaching and Learning Secondary School Mathematics

'Space is big. Really big. You just won't believe how vastly, hugely, mind-bogglingly big it is. I mean, you may think it's a long way down the street to the chemist, but that's just peanuts to space.' Douglas Adams, Hitch-hiker's Guide to the Galaxy We human beings have trouble with infinity - yet infinity is a surprisingly human subject. Philosophers and mathematicians have gone mad contemplating its nature and complexity - yet it is a concept routinely used by schoolchildren. Exploring the infinite is a journey into paradox. Here is a quantity that turns arithmetic on its head, making it feasible that $1 = 0$. Here is a concept that enables us to cram as many extra guests as we like into an already full hotel. Most bizarrely of all, it is quite easy to show that there must be something bigger than infinity - when it surely should be the biggest thing that could possibly be. Brian Clegg takes us on a fascinating tour of that borderland between the extremely large and the ultimate that takes us from Archimedes, counting the grains of sand that would fill the universe, to the latest theories on the physical reality of the infinite. Full of unexpected delights, whether St Augustine contemplating the nature of creation, Newton and Leibniz battling over ownership of calculus, or Cantor struggling to publicise his vision of the transfinite, infinity's fascination is in the way it brings together the everyday and the extraordinary, prosaic daily life and the esoteric. Whether your interest in infinity is mathematical, philosophical, spiritual or just plain curious, this accessible book offers a stimulating and entertaining read.

The Last Human

The Hitchhiker's Guide to the Galaxy provides an excellent way of looking at some intriguing issues in philosophy, from vegetarianism and Artificial Intelligence to God, space and time. This is an entertaining yet thought provoking volume for students, philosophers and fans of The Hitchhiker's series.

Starfish

Comprehensive and concise, this handbook has chapters on computing visualization, large database designs, advanced pattern matching and other key bioinformatics techniques. It is a practical guide to computing in the growing field of Bioinformatics--the study of how information is represented and transmitted in biological systems, starting at the molecular level.

A Hitchhiker's Guide to Virtual Reality

Biostatistics with R is designed around the dynamic interplay among statistical methods, their applications in biology, and their implementation. The book explains basic statistical concepts with a simple yet rigorous language. The development of ideas is in the context of real applied problems, for which step-by-step instructions

for using R and R-Commander are provided. Topics include data exploration, estimation, hypothesis testing, linear regression analysis, and clustering with two appendices on installing and using R and R-Commander. A novel feature of this book is an introduction to Bayesian analysis. This author discusses basic statistical analysis through a series of biological examples using R and R-Commander as computational tools. The book is ideal for instructors of basic statistics for biologists and other health scientists. The step-by-step application of statistical methods discussed in this book allows readers, who are interested in statistics and its application in biology, to use the book as a self-learning text.

A History of Chinese Mathematics

A huge international corporation has developed a facility along the Juan de Fuca Ridge at the bottom of the Pacific Ocean to exploit geothermal power. They send a bio-engineered crew--people who have been altered to withstand the pressure and breathe the seawater--down to live and work in this weird, fertile undersea darkness. Unfortunately the only people suitable for long-term employment in these experimental power stations are crazy, some of them in unpleasant ways. How many of them can survive, or will be allowed to survive, while worldwide disaster approaches from below? Starfish, the first installment in Peter Watts' Rifters Trilogy At the Publisher's request, this title is being sold without Digital Rights Management Software (DRM) applied.

Plague Ship (SF Classic)

This volume brings together recent research and commentary in secondary school mathematics from a breadth of contemporary Canadian and International researchers and educators. It is both representative of mathematics education generally, as well as unique to the particular geography and culture of Canada. The chapters address topics of broad applicability such as technology in learning mathematics, recent interest in social justice contexts in the learning of mathematics, as well as Indigenous education. The voices of classroom practitioners, the group ultimately responsible for implementing this new vision of mathematics teaching and learning, are not forgotten. Each section includes a chapter written by a classroom teacher, making this volume unique in its approach. We have much to learn from one another, and this volume takes the stance that the development of a united vision, supported by both research and professional dialog, provides the first step.

Crew One

A new edition of a classic textbook on complex analysis with an emphasis on translating visual intuition to rigorous proof.

Philosophy and The Hitchhiker's Guide to the Galaxy

Traces the development of mathematical thinking and describes the characteristics of the "republic of numbers" in terms of humankind's fascination with, and growing knowledge of, infinity.

Behemoth

From the Pulitzer-Prize winning author of The Underground Railroad: a tender, hilarious, and supremely original novel about coming-of-age in the 80s. Benji Cooper is one of the few black students at an elite prep school in Manhattan. But every summer, Benji escapes to the Hamptons, to Sag Harbor, where a small community of African American professionals have built a world of their own. The summer of '85 won't be without its usual trials and tribulations, of course. There will be complicated new handshakes to fumble through and state-of-the-art profanity to master. Benji will be tested by contests big and small, by his misshapen haircut (which seems to have a will of its own), by the New Coke Tragedy, and by his secret Lite FM addiction. But maybe, just maybe, this summer might be one for the ages.

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION