

learn programming basics, from variables to objects Understand the fundamentals of computer graphics Create interactive graphics with easy-to-follow projects Learn to apply data visualization techniques Capture and manipulate webcam audio and video feeds in the browser

Human Computation Edith Law 2011-08-08 Human computation is a new and evolving research area that centers around harnessing human intelligence to solve computational problems that are beyond the scope of existing Artificial Intelligence (AI) algorithms. With the growth of the Web, human computation systems can now leverage the abilities of an unprecedented number of people via the Web to perform complex computation. There are various genres of human computation applications that exist today. Games with a purpose (e.g., the ESP Game) specifically target online gamers who generate useful data (e.g., image tags) while playing an enjoyable game. Crowdsourcing marketplaces (e.g., Amazon Mechanical Turk) are human computation systems that coordinate workers to perform tasks in exchange for monetary rewards. In identity verification tasks, users perform computation in order to gain access to some online content; an example is reCAPTCHA, which leverages millions of users who solve CAPTCHAs every day to correct words in books that optical character recognition (OCR) programs fail to recognize with certainty. This book is aimed at achieving four goals: (1) defining human computation as a research area; (2) providing a comprehensive review of existing work; (3) drawing connections to a wide variety of disciplines, including AI, Machine Learning, HCI, Mechanism/Market Design and Psychology, and capturing their unique perspectives on the core research questions in human computation; and (4) suggesting promising research directions for the future. Table of Contents: Introduction / Human Computation Algorithms / Aggregating Outputs / Task Routing / Understanding Workers and Requesters / The Art of Asking Questions / The Future of Human Computation

Interaction Design 2003

Understanding Light Microscopy Jeremy Sanderson 2019-03-28 Introduces readers to the enlightening world of the modern light microscope There have been rapid advances in science and technology over the last decade, and the light microscope, together with the information that it gives about the image, has changed too. Yet the fundamental principles of setting up and using a microscope rests upon unchanging physical principles that have been understood for years. This informative, practical, full-colour guide fills the gap between specialised edited texts on detailed research topics, and introductory books, which concentrate on an optical approach to the light microscope. It also provides comprehensive coverage of confocal microscopy, which has revolutionised light microscopy over the last few decades. Written to help the reader understand, set up, and use the often very expensive and complex modern research light microscope properly, Understanding Light Microscopy keeps mathematical formulae to a minimum—containing and explaining them within boxes in the text. Chapters provide in-depth coverage of basic microscope optics and design; ergonomics; illumination; diffraction and image formation; reflected-light, polarised-light, and fluorescence microscopy; deconvolution; TIRF microscopy; FRAP & FRET; super-resolution techniques; biological and materials specimen preparation; and more. Gives a didactic introduction to the light microscope Encourages readers to use advanced fluorescence and confocal microscopes within a research institute or core microscopy facility Features full-colour illustrations and workable practical protocols Understanding Light Microscopy is intended for any scientist who wishes to understand and use a modern light microscope. It is also ideal as supporting material for a formal taught course, or for individual students to learn the key aspects of light microscopy through their own study.

Pixel Art for Game Developers Daniel Silber 2015-07-28 Is the art for your video game taking too long to create? Learning to create Pixel Art may be the answer to your development troubles. Uncover the secrets to creating stunning graphics with Pixel Art for Game Developers. The premier how-to book on Pixel Art and Pixel Art software, it focuses on the universal principles of the craft.The book provide

Conference Proceedings. The Future of Education Pixel 2015-07-01

Technology Integration and High Possibility Classrooms Jane Hunter 2015-03-02 Technology Integration and High Possibility Classrooms provides a fresh vision for education in schools based on new research from in-depth studies of technology integration in exemplary teachers' classrooms. This timely book meets the demand for more examples of effective technology integration by providing a new conceptual understanding that builds on the popular and highly influential theoretical framework of technological, pedagogical and content knowledge (TPACK). Technology Integration and High Possibility Classrooms details four rich case studies set in different contexts with students ranging from age 6 to 16. Each case study articulates in very practical terms what characterizes exemplary teachers' knowledge of technology integration and how that is applied in classrooms. This highly accessible book clearly demonstrates how theory informs practice and provides new possibilities for learning in twenty-first-century schools.

Barron's AP Computer Science A with CD-ROM Roselyn Teukolsky 2015-01-01 This updated manual presents computer science test takers with— Three AP practice tests for the Level A course, including a diagnostic test Charts detailing the topics for each test question All test questions answered and explained A subject review covers static

variables, the List interface, Integer. MAX_VALUE, and Integer. MIN_VALUE. The practice exams contain several new questions on two-dimensional arrays and reflect the new free-response style used on the 2012 AP exam. This manual comes with aCD-ROM that has two more model AP exams with answers, explanations, automatic scoring for multiple-choice questions, and a scoring chart. BONUS ONLINE PRACTICE TEST: Students who purchase this book or package will also get FREE access to one additional full-length online AP Computer Science A test with all questions answered and explained. System Requirements: This program will run on a PC with: 2.33GHz or faster x86-compatible processor, or Intel® Atom™, 1.6GHz or faster processor for netbooks Microsoft® Windows® Server 2008, Windows Vista® Home Premium, Business, Ultimate, or Enterprise (including 64 bit editions) with Service Pack 2, Windows 7, or Windows 8 Classic 512MB of RAM (1GB of RAM recommended) This program will run on a Mac® with: Intel Core™, 1.83GHz or faster processor Mac OS X v10.6, v10.7, v10.8, or v10.9 512MB of RAM (1GB of RAM recommended)

Proceedings of International Conference on ICT for Sustainable Development Suresh Chandra Satapathy 2016-02-10 The two volumes of this book collect high-quality peer-reviewed research papers presented in the International Conference on ICT for Sustainable Development (ICT4SD 2015) held at Ahmedabad, India during 3 – 4 July 2015. The book discusses all areas of Information and Communication Technologies and its applications in field for engineering and management. The main focus of the volumes are on applications of ICT for Infrastructure, e-Governance, and contemporary technologies advancements on Data Mining, Security, Computer Graphics, etc. The objective of this International Conference is to provide an opportunity for the researchers, academicians, industry persons and students to interact and exchange ideas, experience and expertise in the current trend and strategies for Information and Communication Technologies.

PC Mag 2004-05-18 PCMag.com is a leading authority on technology, delivering Labs-based, independent reviews of the latest products and services. Our expert industry analysis and practical solutions help you make better buying decisions and get more from technology.

Space Telescopes and Instrumentation II Martin J. L. Turner 2006 Proceedings of SPIE present the original research papers presented at SPIE conferences and other high-quality conferences in the broad-ranging fields of optics and photonics. These books provide prompt access to the latest innovations in research and technology in their respective fields. Proceedings of SPIE are among the most cited references in patent literature.

Medical Imaging Signals and Systems Jerry L. Prince 2014 Covers the most important imaging modalities in radiology: projection radiography, x-ray computed tomography, nuclear medicine, ultrasound imaging, and magnetic resonance imaging. Organized into parts to emphasize key overall conceptual divisions.

Robust Methods for the Analysis of Images and Videos for Fisheries Stock Assessment National Research Council 2015-02-24 The National Marine Fisheries Service (NMFS) is responsible for the stewardship of the nation's living marine resources and their habitat. As part of this charge, NMFS conducts stock assessments of the abundance and composition of fish stocks in several bodies of water. At present, stock assessments rely heavily on human data-gathering and analysis. Automatic means of fish stock assessments are appealing because they offer the potential to improve efficiency and reduce human workload and perhaps develop higher-fidelity measurements. The use of images and video, when accompanied by appropriate statistical analyses of the inferred data, is of increasing importance for estimating the abundance of species and their age distributions. Robust Methods for the Analysis of Images and Videos for Fisheries Stock Assessment is the summary of a workshop convened by the National Research Council Committee on Applied and Theoretical Statistics to discuss analysis techniques for images and videos for fisheries stock assessment. Experts from diverse communities shared perspective about the most efficient path toward improved automation of visual information and discussed both near-term and long-term goals that can be achieved through research and development efforts. This report is a record of the presentations and discussions of this event.

Once Upon a Midnight Sea Ava Bradley 2015-06-16 The heiress of Montague Shipping sets out across Chesapeake Bay to attend a party, but instead finds herself shanghaied by a vengeful thief intending to use her ship—and her jewels—to break a prisoner out of Devil's Island! Jewel thief Christian De la Croix has spent his life plotting revenge against the double-crosser who left his father to die on French Guiana's brutal island prison twenty years earlier. But when a letter comes revealing his father is alive, Christian's quest turns into a rescue mission. There is no one better to help him than the betrayer himself, shipbuilding magnate Edmund Montague. Christian plans to steal Edmund's private luxury vessel to sail there, and the necklace his father paid for with his life to buy his freedom. Accidentally kidnapping the man's spoiled daughter is just a lucky accident, and Christian enjoys the many opportunities he finds to annoy her. Unfortunately, she finds as many ways, if not more, to annoy him right back. Adriana Montague prayed for a way to escape her impending marriage to an arrogant and conceited man she doesn't love, but never expected it to come in the form of a vengeful thief who steals her ship and kidnaps her. Christian blames Adriana's father for his family's misfortunes, and boldly claims he's robbing her and sailing to South America! But Adriana has a few tricks up her sleeve, and though she's glad to be granted a temporary reprieve from her wedding, she's not about to let their voyage resemble a pleasure cruise.