Ict Codes Of Ethics Cepis

Analyzes key critical HR variables and defines previously undiscovered issues in the HR field.

Social Issues in Computing provides information pertinent to the social implications of technology. This book presents the highly dynamic interaction between computers and society. Organized into 13 chapters, this book begins with an overview of the problems associated with computers and attempts to indicate some of the viewpoints, assumptions, and biases from which the discussion is undertaken. This text then examines in detail the effects of computers on society ad describes the extent of computer use. Other chapters consider the disparities in computer use between various countries, as well as the degree to which various countries are able to share in the market for computer products and services. This book discusses as well the factors that led to the rapid and widespread adoption of computers. The final chapter deals with the effects of automation, computers, and technology. This book is a valuable resource for computer science students and research workers.

This book provides information on trust and risk to businesses that are developing electronic commerce systems and helps consumers understand the risks in using the Internet for purchases and show them how to protect themselves.

Volume 1 (A and B) of the "Yearbook of International Organizations" covers international organizations throughout the world, comprising their aims, activities and events. This includes names (in English, French and, where available, other languages), abbreviations and descriptions of over 34,000 not-for-profit organizations currently active in every field of human endeavor, as well as references to associated organizations, whose goals cross all economic, political and geographical borders, offering an insight into new, productive relationships. The volume also allows quick and easy cross-referencing from volumes 2, 3, 4, and 6.

Codes, spaces for discussion and law

Economics of Information Security

Social Issues in Computing

IT Capability Maturity Framework™ (IT-CMF™) 2nd edition

A Responsible, Sustainable and Ethical Approach

Information Systems and e-Business Technologies

Business organizations, both public and private, are constantly challenged to innovate and generate real value. CIOs are uniquely well-positioned to seize this opportunity and adopt the role of business transformation partner, helping their organizations to grow and prosper with innovative, IT-enabled products, services and processes. To succeed in this, however, the IT function needs to manage an array of inter-related and inter-dependent disciplines focused on the generation of business value. In response to this need, the Innovation Value Institute, a cross-industry international consortium, developed the IT Capability Maturity Framework™ (IT-CMF™). This second edition of the IT Capability Maturity Framework™ (IT-CMF™) is a comprehensive suite of tried and tested practices, organizational assessment approaches, and improvement roadmaps covering key IT capabilities needed to optimize value and innovation in the IT function and the wider organization. It enables organizations to devise more robust strategies, make better-informed decisions, and perform more effectively, efficiently and consistently. IT-CMF is: An integrated management toolkit covering 36 key capability management disciplines, with organizational maturity profiles, assessment methods, and improvement roadmaps for each. A coherent set of concepts and principles, expressed in business language, that can be used to guide discussions on setting goals and evaluating performance. A unifying (or umbrella) framework that complements other, domain-specific frameworks already in use in the organization, helping to resolve conflicts between them, and filling gaps in their coverage. Industry/sector and vendor independent. IT-CMF can be used in any organizational context to guide performance improvement. A rigorously developed approach, underpinned by the principles of Open Innovation and guided by the Design Science Research methodology, synthesizing leading academic research with industry practitioner expertise

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การบำบัดทางไกล เป็นเทคโนโลยีที่ก้าวหน้าซึ่งจะนำมาใช้ในการให้บริการด้านสุขภาพที่ทันสมัย *โดยเน้นเป็นพิเศษ ในการใช้งานทางคลินิก ●ของ● ความเป็นจริงเสมือนจริงเป้าหมายของหนังสือเล่มนี้ คือการวิเคราะห์กระบวนการ ที่แอพพลิเคชั่น จะมีส่วนช่วยในการ หนึ่ง สองสาม หน้าที่ของ45หน้า ตัวอย่างของ96ปี นี้ คือ ความกับ การใช้งาน5จริง

The goal of this book is to analyze the processes by which cybertherapy applications will contribute to the delivery of state-of-the-art health services. Particular attention is given to the clinical use of virtual reality technology.

ICT Skills Certification in Europe

Automatic Solar Tracking Sun Tracking Satellite Tracking rastreador solar seguimiento solar seguidor solar automático de seguimiento solar

Professionalism in the Information and Communication Technology Industry

Encyclopedia of Human Resources Information Systems: Challenges in e-HRM

IFIP WG 9.7 International Conference, HC 2010, Held as Part of WCC 2010, Brisbane, Australia, September 20-23, 2010, Proceedings

Proceedings of the First International Conference on SCI 2016, Volume 1

This book constitutes the refereed proceedings of UNISCON 2008 held in Klagenfurt, Austria, during April 22-25, 2008. UNISCON combines the ECOMO workshop series and the ISTA conference series. The 19 papers dealing with conceptual modeling, model-driven software development and information systems applications represent a 30% selection from the original set of submissions. They are completed by two keynote lectures and 35 papers from internationally renowned researchers, invited in honor of Heinrich C. Mayr, whose 60th birthday is also celebrated at this event, that he originally created.

ICT Innovations for Sustainability is an investigation of how information and communication technology can contribute to sustainable development. It presents clear definitions of sustainability, suggesting conceptual frameworks for the positive and negative effects of ICT on sustainable development. It reviews methods of assessing the direct and indirect impact of ICT systems on energy and materials demand, and examines the results of such assessments. In addition, it investigates ICT-based approaches to supporting sustainable patterns of production and consumption, analyzing them at various levels of abstraction – from end-user devices, Internet infrastructure, user behavior, and social practices to macro-economic indicators. Combining approaches from Computer Science, Information Systems, Human-Computer Interaction, Economics, and Environmental Sciences, the book presents a new, holistic perspective on ICT for Sustainability (ICT4S). It is an indispensable resource for anyone working in the area of ICT for Energy Efficiency, Life Cycle Assessment of ICT, Green IT, Green Information Systems, Environmental Informatics, Energy Informatics, Sustainable HCI, or Computational Sustainability.

Listing over 10,000 entries, Harrod's Librarians' Glossary and Reference Book spans everything from traditional printing terms to search engines and from book formats to URLs. Revisions for this tenth edition have centred in particular on the Information Society and its ramifications, on the general shift towards electronic resources, and on e-commerce, e-learning and e-government, whilst at the same time maintaining key areas predating the IT revolution. Web terminology, URLs and IT terms have been checked and updated, and coverage of terms relating to digitization and digital resources, portals, multimedia and electronic products has been revised or expanded as necessary. Harrod's Glossary now includes Knowledge Management terms, and this edition has also focused on developments in the field of intellectual property, copyright, patents, privacy and piracy. It gives wide international coverage of names, addresses and URLs of major libraries and other important organizations in the information sector, of professional associations, fellowships, networks, government bodies, projects and programmes, consortia and institutions, influential reports and other key publications. Entries are included on classification and file coding, on records management and archiving and on both the latest and the most enduring aspects of library and information skills. Even with the Web at your fingertips Harrod's Librarians' Glossary and Reference Book remains a quicker reference for explaining specialist terms, jargon and acronyms, and for finding the URLs you need, whether you are working in a print-based or digital library, in archiving, records management, conservation, bookselling or publishing.

Luciano Floridi develops an original ethical framework for dealing with the new challenges posed by Information and Communication Technologies (ICTs). ICTs have profoundly changed many aspects of modern life, and a new discipline of Information Ethics (IE) has emerged that investigates their ethical impact on human life and society. However, the equally important, ethical framework indispensable for dealing with the new challenges posed by information andcommunication technologies (ICTs), still needs to be developed. The Ethics of Information takes up this task, as Floridi lays down, for the first time, the conceptual foundations for IE. He does sosystematically, by pursuing three goals: a metatheoretical goal; an introductory goal; and an analytic goal, which answers several key theoretical questions of great philosophical interest.

History of Nordic Computing

17th IFIP WG 2.13 International Conference, OSS 2021, Virtual Event, May 12–13, 2021, Proceedings

IFIP WG 3.4/3.7 International Conferences, KCICTP and ITEM 2014, Potsdam, Germany, July 1-4, 2014, Revised Selected Papers

ICT Innovations for Sustainability

Ethische Perspektiven auf Biomedizinische Technologie

Trust and Risk in Internet Commerce

For the Yearbook of International Organizations, the most up-to-date and comprehensive reference to international organizations, the UIA has selected the most important 31,086 organizations from its extensive database of current and previous organizations. Yearbook provides profiles of 5,546 intergovernmental and 25,540 international non-governmental organizations active in nearly 300 countries and territories in the world today. Organization descriptions listed in Volume 1 are numbere sequentially to facilitate quick and easy cross-referencing from the other Yearbook Volumes. Users can refer to Volumes 2 and 3 to locate organizations by region or subject respectively, and comprehensive indexes are included. Naturally, the high standards of accuracy, consistency and detail set by previous editions of the Yearbook of International Organizations have been maintained for this edition.

Computing in the Nordic countries started in late 1940s mainly as an engineering activity to build computing devices to perform mathematical calculations and assist mathematicians and engineers in scientific problem solving. The early computers of the Nordic countries emerged during the 1950s and had names like BARK, BESK, DASK, SMIL, SARA, ESKO, and NUSSE. Each of them became a nucleus in institutes and centres for mathematical computations programmed and used by highly qualified professionals. However, one should not forget the punched-card machine technology at this time that had existed for several decades. In addition, we have a Nordic name, namely Frederik Rosing Bull, contributing to the fundaments of punched card technology and forming the French company Bull. Commercial products such as FACIT EDB and SAAB D20-series computers in Sweden, the Danish GIER computer, the Nokia MIKKO computer in Finland, as well as the computers of Norsk Data in Norway followed the early computers. In many cases, however, companies and institutions did not further develop or exploit Nordic computing hardware, even though it exhibited technical advantages. Consequently, in the 1970s, US computers, primarily from IBM, flooded the Nordic market.

This major reference work represents the first attempt to confront, on a world-wide basis, the way computer associations face up to their own responsibilities in an age increasingly dominated by information and communication technology. The book deals with the codes of ethics and conduct, and related issues. It is the first book to deal with homogenous codes namely codes of national computer societies. Some thirty codes are compared and analysed in depth. To put these into perspective, there are discussion papers covering the methodological, philosophical and organisational issues.

This is the eccentric story of one of the most bizarre marriages in the history of British business: the invention of the world's first office computer and the Lyons Teashop. The Lyons teashops were one of the great British institutions, providing a cup of tea and a penny bun through the depression, the war, austerity and on into the 1960s and 1970s. Yet Lyons also has a more surprising claim to history. In the 1930s John Simmons, a young graduate in charge of the clerks' offices that totalled all the bills issued by the Nippies and kept track of the costs of all the tea, cakes and other goods distributed to the nation's cafes and shops, became obsessed by the new ideas of scientific management. He had a dream: to build a machine that would automate the millions of tedious transactions and process them in as little time as possible.

Unimagined Futures – ICT Opportunities and Challenges

Systems, Software and Services Process Improvement

Ethics of Computing

The New Development of Technology Enhanced Learning

Annuaire Des Organisations Internationales

A Directory of Over 10,200 Terms, Organizations, Projects and Acronyms in the Areas of Information Management, Library Science, Publishing and Archive Management

Der Ruf nach Ethik ist überall zu hören. Angesichts der großen Herausforderungen, die gerade durch die technologischen Entwicklungen im Gesundheitswesen anstehen, ist das nicht verwunderlich, weil Ethik allgemein mit Orientierung verbunden wird. Aber welche Orientierung kann Ethik in diesem Fall geben und welche Ethik braucht es, um die notwendigen Fragen zu beraten und entsprechende Schritte zu gehen? Braucht es mehr Ethik im Bereich von Forschung und Entwicklung für die Biomedizinische Technik? Ist es nicht ein Dilemma der Ethik, dass sie entweder zu spät kommt, sie ethische Bewertungen für technische Entwicklungen liefert, die bereits etabliert und kaum mehr zu korrigieren, geschweige denn rückholbar sind? Eine ›prospektive‹ Ethik andererseits handelt sich leicht den Vorwurf ein, alarmistisch oder systemstabilisierend, in jedem Fall unseriös und unnötig zu sein, weil sie über Möglichkeiten spekuliert und hierbei entweder die Probleme herunterspielt oder übertreibt. Genauer wäre noch zu fragen, wer denn überhaupt nach (mehr) Ethik ruft? So steht, wer nach Ethik ruft, leicht auch im Verdacht, ein Ablenkungsmanöver zu betreiben, um die schmerzhaften politischen Fragen zu umgehen, oder – kaum besser – das jeweilige System noch effizienter zu machen. So findet sich die Ethik in der prekären Situation, als Feigenblatt für eine technisch-ökonomische Entwicklung zu dienen, die damit gleichsam approbiert wird. Umgekehrt steht eine Ethik, die penetrant nachfragt und womöglich gar die ›Systemfrage‹ stellt, in der Gefahr, als lebensfremde Schreibtischdisziplin ohne Wirkung zu bleiben. Eine Ethik, die sich auf die Niederungen der praktischen Projekte und alltäglichen Forschungs- und Entwicklungsarbeit einlässt, wird aus diesem Prozess nicht ohne »schmutzige Hände« (Celikates 2011) herauskommen. Was aber bedeutet das für die technologischen Prozesse, für die Ethik als Disziplin und für die gesellschaftliche Entwicklung? Angesichts der eminenten Entwicklungen im biomedizinisch-technischen Bereich – wesentliche Treiber des Forschritts sind Biomolekularisierung, Miniaturisierung, Personalisierung, Computerisierung und Vernetzung – werden auf der Grundlage dieser Entwicklungen in diesem neuen Band der Reihe Health Academy ethische Reflexionen geliefert, welche die Bedeutung und die Implikationen dieser komplexen, pervasiven und ubiquitären technischen Welten für das Selbstverständnis der Menschen und ihr Handeln reflexiv einholen. Hierzu werden nach einführenden Überlegungen aus technischer wie ethischer Perspektive in einem ersten Teil ethische und anthropologische Herausforderungen anhand ausgewählter medizintechnischer Entwicklungen dargestellt. Der zweite Teil bietet Perspektiven aus den Bereichen des Rechts, der Ökonomie sowie geisteswissenschaftlicher Disziplinen mit einem unmittelbaren Bezug zur Entwicklung oder dem Einsatz von biomedizinischer Technik. Der dritte Teil reflektiert auf ausgewählte medizin- und informationstechnische Anwendungen und die damit verbundenen ethischen Aspekte. Die hier getroffene Auswahl strebt einerseits eine gewisse Repräsentativität der Themen an, macht aber zugleich deutlich, wie nötig eine differenzierte und konkret arbeitende Ethik ist. Der vierte Teil blickt auf die verschiedenen Formen von Institutionalisierung, die in der Ethik mit Bezug auf die biomedizinische Technik mittlerweile erreicht worden sind und fragt von hier aus nach möglichen Weiterentwicklungen. Im Contrapunctus wird in bewährter Weise das Thema noch einmal von einer ganz anderen Seite beleuchtet.

"Free/Open Source Software Development" uses a multitude of research approaches to explore free and open source software development processes, attributes of their products, and the workings within the development communities.

Automatic Solar Tracking Sun Tracking : This book details Automatic Solar-Tracking, Sun-Tracking-Systems, Solar-Trackers and Sun Tracker Systems. An intelligent automatic solar tracker is a device that orients a payload toward the sun. Such programmable computer based solar tracking device includes principles of solar tracking, solar tracking systems, as well as microcontroller, microprocessor and/or PC based solar tracking control to orientate solar reflectors, solar lenses, photovoltaic panels or other optical configurations towards the sun. Motorized space frames and kinematic systems ensure motion dynamics and employ drive technology and gearing principles to steer optical configurations such as mangin, parabolic, conic, or cassegrain solar energy collectors to face the sun and follow the sun movement contour continuously (seguimiento solar y automatización, automatización seguidor solar, tracking solar e automação, automação seguidor solar, inseguimento solare, inseguitore solare, energia termica, sole seguito, posizionatore motorizzato) In harnessing power from the sun through a solar tracker or practical solar tracking system, renewable energy control automation systems require automatic solar tracking software and solar position algorithms to accomplish dynamic motion control with control automation architecture, circuit boards and hardware. On-axis sun tracking system such as the altitude-azimuth dual axis or multi-axis solar tracker systems use a sun tracking algorithm or ray tracing sensors or software to ensure the sun's passage through the sky is traced with high precision in automated solar tracker applications, right through summer solstice, solar equinox and winter solstice. A high precision sun tracking position calculator or sun position algorithm is this an important step in the design and construction of an automatic solar tracking system. The content of the book is also applicable to communication antenna satellite tracking and moon tracking algorithm source code for which links to free download links are provided. From sun tracing software perspective, the sonnet Tracing The Sun has a literal meaning. Within the context of sun track and trace, this book explains that the sun's daily path across the sky is directed by relatively simple principles, and if grasped/understood, then it is relatively easy to trace the sun with sun following software. Sun position computer software for tracing the sun are available as open source code, sources that is listed in this book. The book also describes the use of satellite tracking software and mechanisms in solar tracking applications. Ironically there was even a system

called sun chaser, said to have been a solar positioner system known for chasing the sun throughout the day. Using solar equations in an electronic circuit for automatic solar tracking is quite simple, even if you are a novice, but mathematical solar equations are over complicated by academic experts and professors in text-books, journal articles and internet websites. In terms of solar hobbies, scholars, students and Hobbyist's looking at solar tracking electronics or PC programs for solar tracking are usually overcome by the sheer volume of scientific material and internet resources, which leaves many developers in frustration when search for simple experimental solar tracking source-code for their on-axis sun-tracking systems. This booklet will simplify the search for the mystical sun tracking formulas for your sun tracker innovation and help you develop your own autonomous solar tracking controller. By directing the solar collector directly into the sun, a solar harvesting means or device can harness sunlight or thermal heat. This is achieved with the help of sun angle formulas, solar angle formulas or solar tracking procedures for the calculation of sun's position in the sky. Automatic sun tracking system software includes algorithms for solar altitude azimuth angle calculations required in following the sun across the sky. In using the longitude, latitude GPS coordinates of the solar tracker location, these sun tracking software tools supports precision solar tracking by determining the solar altitude-azimuth coordinates for the sun trajectory in altitude-azimuth tracking at the tracker location, using certain sun angle formulas in sun vector calculations. Instead of follow the sun software, a sun tracking sensor such as a sun sensor or webcam or video camera with vision based sun following image processing software can also be used to determine the position of the sun optically. Such optical feedback devices are often used in solar panel tracking systems and dish tracking systems. Dynamic sun tracing is also used in solar surveying, DNI analyser and sun surveying systems that build solar infographics maps with solar radiance, irradiance and DNI models for GIS (geographical information system). In this way geospatial methods on solar/environment interaction makes use use of geospatial technologies (GIS, Remote Sensing, and Cartography). Climatic data and weather station or weather center data, as well as queries from sky servers and solar resource database systems (i.e. on DB2, Sybase, Oracle, SQL, MySQL) may also be associated with solar GIS maps. In such solar resource modelling systems, a pyranometer or solarimeter is normally used in addition to measure direct and indirect, scattered, dispersed, reflective radiation for a particular geographical location. Sunlight analysis is important in flash photography where photographic lighting are important for photographers. GIS systems are used by architects who add sun shadow analysis, solar flux calculations, optical modelling or to perform weather modelling. Such systems often employ a computer operated telescope type mechanism with ray tracing program software as a solar navigator or sun tracer that determines the solar position and intensity. The purpose of this booklet is to assist developers to track and trace suitable source-code and solar tracking algorithms for their application, whether a hobbyist, scientist, technician or engineer. Many open-source sun following and tracking algorithms and source-code for solar tracking programs and modules are freely available to download on the internet today. Certain proprietary solar tracker kits and solar tracking controllers include a software development kit SDK for its application programming interface API attributes (Pebble). Widget libraries, widget toolkits, GUI toolkit and UX libraries with graphical control elements are also available to construct the graphical user interface (GUI) for your solar tracking or solar power monitoring program. The solar library used by solar position calculators, solar simulation software and solar contour calculators include machine program code for the solar hardware controller which are software programmed into Micro-controllers, Programmable Logic Controllers PLC, programmable gate arrays, Arduino processor or PIC processor. PC based solar tracking is also high in demand using C++, Visual Basic VB, as well as MS Windows, Linux and Apple Mac based operating systems for sun path tables on Matlab, Excel. Some books and internet webpages use other terms, such as: sun angle calculator, sun position calculator or solar angle calculator. As said, such software code calculate the solar azimuth angle, solar altitude angle, solar elevation angle or the solar Zenith angle (Zenith solar angle is simply referenced from vertical plane, the mirror of the elevation angle measured from the horizontal or ground plane level). Similar software code is also used in solar calculator apps or the solar power calculator apps for IOS and Android smartphone devices. Most of these smartphone solar mobile apps show the sun path and sun-angles for any location and date over a 24 hour period. Some smartphones include augmented reality features in which you can physically see and look at the solar path through your cell phone camera or mobile phone camera at your phone's specific GPS location. In the computer programming and digital signal processing (DSP) environment, (free/open source) program code are available for VB, .Net, Delphi, Python, C, C++, PHP, Swift, ADM, F, Flash, Basic, QBasic, GBasic, KBasic, SIMPL language, Squirrel, Solaris, Assembly language on operating systems such as MS Windows, Apple Mac, DOS or Linux OS. Software algorithms predicting position of the sun in the sky are commonly available as graphical programming platforms such as Matlab (Mathworks), Simulink models, Java applets, TRNSYS simulations, Scada system apps, Labview module, Beckhoff TwinCAT (Visual Studio), Siemens SPA, mobile and iphone apps, Android or iOS tablet apps, and so forth. At the same time, PLC software code for a range of sun tracking automation technology can follow the profile of sun in sky for Siemens, HP, Panasonic, ABB, Allan Bradley, OMRON, SEW, Festo, Beckhoff, Rockwell, Schneider, Andreas Hauser, Fudji electric. Honeywell, Fuchs, Yokonawa, or Muthibishi platforms. Sun path projection software are also available for a range of modular IPC embedded PC motherboards, Industrial PC, PLC (Programmable Logic Controller) and PAC (Programmable Automation Controller) such as the Siemens S7-1200 or Siemens Logo, Beckhoff IPC or CX series, OMRON PLC, Ercam PLC, AC500plc ABB, National Instruments NI PXI or NI cRIO, PIC processor, Intel 8051/8085, IBM (Cell, Power, Brain or Truenorth series), FPGA (Xilinx Altera Nios), Intel, Xeon, Atmel megaAVR, MPU, Maple, Teensy, MSP, XMOS, Xbee, ARM, Raspberry Pi, Eagle, Arduino or Arduino AtMega microcontroller, with servo motor, stepper motor, direct current DC pulse width modulation PWM (current driver) or alternating current AC SPS or IPC variable frequency drives VFD motor drives (also termed adjustable-frequency drive, variable-speed drive, AC drive, micro drive or inverter drive) for electrical, mechatronic, pneumatic, or hydraulic solar tracking actuators. The above motion control and robot control systems include analogue or digital interfacing ports on the processors to allow for tracker angle orientation feedback control through one or a combination of angle sensor or angle encoder, shaft encoder, precision encoder, optical encoder, magnetic encoder, direction encoder, rotational encoder, chip encoder, tilt sensor, inclination sensor, or pitch sensor. Note that the tracker's elevation or zenith axis angle may measured using an altitude angle-, declination angle-, inclination angle-, pitch angle-, or vertical angle-, zenith angle- sensor or inclinometer. Similarly the tracker's azimuth axis angle be measured with a azimuth angle-, horizontal angle-, or roll angle- sensor. Chip integrated accelerometer magnetometer gyroscope type angle sensors can also be used to calculate displacement. Other options include the use of thermal imaging systems such as a Fluke thermal imager, or robotic or vision based solar tracker systems that employ face tracking, head tracking, hand tracking, eye tracking and car tracking principles in solar tracking. With unattended decentralised rural, island, isolated, or autonomous off-grid power installations, remote control, monitoring, data acquisition, digital datalogging and online measurement and verification equipment becomes crucial. It assists the operator with supervisory control to monitor the efficiency of remote renewable energy resources and systems and provide valuable web-based feedback in terms of CO_2 and clean development mechanism (CDM) reporting. A power quality analyser for diagnostics through internet, WiFi and cellular mobile links is most valuable in frontline troubleshooting and predictive maintenance, where quick diagnostic analysis is required to detect and prevent power quality issues. Solar tracker applications cover a wide spectrum of solar applications and solar assisted application, including concentrated solar power generation, solar desalination, solar water purification, solar steam generation, solar electricity generation, solar industrial process heat, solar thermal heat storage, solar food dryers, solar water pumping, hydrogen production from methane or producing hydrogen and oxygen from water (HHO) through electrolysis. Many patented or non-patented solar apparatus include tracking in solar apparatus for solar electric generator, solar desalinator, solar steam engine, solar ice maker, solar water purifier, solar cooling, solar refrigeration, USB solar charger, solar phone charging, portable solar charging tracker, solar coffee brewing, solar cooking or solar dying means. Your project may be the next breakthrough or patent, but your invention is held back by frustration in search for the sun tracker you require for your solar powered appliance, solar generator, solar tracker robot, solar freezer, solar cooker, solar drier, solar pump, solar freezer, or solar dryer project. Whether your solar electronic circuit diagram include a simplified solar controller design in a solar electricity project, solar power kit, solar hobby kit, solar steam generator, solar hot water system, solar ice maker, solar desalinator, hobbyist solar panels, hobby robot, or if you are developing professional or hobby electronics for a solar utility or micro scale solar powerplant for your own solar farm or solar farming, this publication may help accelerate the development of your solar tracking innovation. Lately, solar polygeneration, solar trigeneration (solar triple generation), and solar quad generation (adding delivery of steam, liquid/gaseous fuel, or capture food-grade CO$_2$) systems have need for automatic solar tracking. These systems are known for significant efficiency increases in energy yield as a result of the integration and re-use of waste or residual heat and are suitable for compact packaged micro solar powerplants that could be manufactured and transported in kit-form and operate on a plug-and play basis. Typical hybrid solar power systems include compact or packaged solar micro combined heat and power (CHP or mCHP) or solar micro combined, cooling, heating and power (CCHP, CHPC, mCCHP, or mCHPC) systems used in distributed power generation. These systems are often combined in concentrated solar CSP and CPV smart microgrid configurations for off-grid rural, island or isolated microgrid, minigrid and distributed power renewable energy systems. Solar tracking algorithms are also used in modelling of trigeneration systems using Matlab Simulink (Modelica or TRNSYS) platform as well as in automation and control of renewable energy systems through intelligent parsing, multi-objective, adaptive learning control and control optimization strategies. Solar tracking algorithms also find application in developing solar models for country or location specific solar studies, for example in terms of measuring or analysis of the fluctuations of the solar radiation (i.e. direct and diffuse radiation) in a particular area. Solar DNI, solar irradiance and atmospheric information and models can thus be integrated into a solar map, solar atlas or geographical information systems (GIS). Such models allows for defining local parameters for specific regions that may be valuable in terms of the evaluation of different solar in photovoltaic of CSP systems on simulation and synthesis platforms such as Matlab and Simulink or in linear or multi-objective optimization algorithm platforms such as COMPOSE, EnergyPLAN or DER-CAM. A dual-axis solar tracker and single-axis solar tracker may use a sun tracker program or sun tracker algorithm to position a solar dish, solar panel array, heliostat array, PV panel, solar antenna or infrared solar nantenna. A self-tracking solar concentrator performs automatic solar tracking by computing the solar vector. Solar position algorithms (TwinCAT, SPA, or PSA Algorithms) use an astronomical algorithm to calculate the position of the sun. It uses astronomical software algorithms and equations for solar tracking in the calculation of sun's position in the sky for each location on the earth at any time of day. Like an optical solar telescope, the solar position algorithm pin-points the solar reflector at the sun and locks onto the sun's position to track the sun across the sky as the sun progresses throughout the day. Optical sensors such as photodiodes, light-dependant-resistors (LDR) or photoresistors are used as optical accuracy feedback devices. Lately we also included a section in the book (with links to microprocessor code) on how the PixArt Wii infrared camera in the Wii remote or Wiimote may be used in infrared solar tracking applications. In order to harvest free energy from the sun, some automatic solar positioning systems use an optical means to direct the solar tracking device. These solar tracking strategies use optical tracking techniques, such as a sun sensor means, to direct sun rays onto a silicon or CMOS substrate to determine the X and Y coordinates of the sun's position. In a solar mems sun-sensor device, incident sunlight enters the sun sensor through a small pin-hole in a mask plate where light is exposed to a silicon substrate. In a web-camera or camera image processing sun tracking and sun following means, object tracking software performs multi object tracking or moving object tracking methods. In an solar object tracking technique, image processing software performs mathematical processing to box the outline of the apparent solar disc or sun blob within the captured image frame, while sun-localization is performed with an edge detection algorithm to determine the solar vector coordinates. An automated positioning system help maximize the yields of solar power plants through solar tracking control to harness sun's energy. In such renewable energy systems, the solar panel positioning system uses a sun tracking techniques and a solar angle calculator in positioning PV panels in photovoltaic systems and concentrated photovoltaic CPV systems. Automatic on-axis solar tracking in a PV solar tracking system can be dual-axis sun tracking or single-axis sun solar tracking. It is known that a motorized positioning system in a photovoltaic panel tracker increase energy yield and ensures increased power output, even in a single axis solar tracking configuration. Other applications such as robotic solar tracker or robotic solar tracking system uses robotica with artificial intelligence in the control optimization of energy yield in solar harvesting through a robotic tracking system. Automatic positioning systems in solar tracking designs are also used in other free energy generators, such as concentrated solar thermal power CSP and dish Stirling systems. The sun tracking device in a solar collector in a solar concentrator or solar collector Such a performs on-axis solar tracking, a dual axis solar tracker assists to harness energy from the sun through an optical solar collector, which can be a parabolic mirror, parabolic reflector, Fresnel lens or mirror array/matrix. A parabolic dish or reflector is dynamically steered using a transmission system or solar tracking slew drive mean. In steering the dish to face the sun, the power dish actuator and actuation means in a parabolic dish system optically focusses the sun's energy on the focal point of a parabolic dish or solar concentrating means. A Stirling engine, solar heat pipe, thermosyphin, solar phase change material PCM receiver, or a fibre optic sunlight receiver means is located at the focal point of the solar concentrator. The dish Stirling engine configuration is referred to as a dish Stirling system or Stirling power generation system. Hybrid solar power systems (used in combination with biogas, biofuel, petrol, ethanol, diesel, natural gas or PNG) use a combination of power sources to harness and store solar energy in a storage medium. Any multitude of energy sources can be combined through the use of controllers and the energy stored in batteries, phase change material, thermal heat storage, and in cogeneration form converted to the required power using thermodynamic cycles (organic Rankin, Brayton cycle, micro turbine, Stirling) with an inverter and charge controller.

The Ethics of Information

17th European Conference, EuroSPI 2010, Grenoble, France, September 1-3, 2010. Proceedings

Understanding Data Communications

Software Sustainability

Yearbook of International Organizations 2012-2013

This book makes an important contribution to the recent evolution in Information and Communication Technologies (ICT) that are human-centred and socially desirable, environmentally sustainable, and ethically acceptable. It introduces the concept of moral, equitable and environmental limits in the ICT domain and proposes a Slow Tech approach to face the challenges of these limits, laying out a set of principles that can be applied in real-life business settings. With the launch of the United Nations Sustainable Development Goals and the growing interest in the circular economy, Slow Tech and ICT - A Responsible, Sustainable and Ethical Approach is a timely tool for forward-thinking businesses.

This book constitutes the refereed proceedings of the 17th IFIP WG 2.13 International Conference on Open Source Systems, OSS 2021, held virtually in May 2021. The 4 full papers and 3 short papers presented were carefully reviewed and selected from 23 submissions. The papers cover a wide range of topics in the field of free/libre open source software (FLOSS) and discuss theories, practices, experiences, and tools on development and applications of OSS systems, with a specific focus on two aspects:(a) the development of open source systems and the underlying technical, social, and economic issue, (b) the adoption of OSS solutions and the implications of such adoption both in the public and in the private sector.

This book focuses on software sustainability, regarded in terms of how software is or can be developed while taking into consideration environmental, social, and economic dimensions. The sixteen chapters cover various related issues ranging from technical aspects like energy-efficient programming techniques, formal proposals related to energy efficiency measurement, patterns to build energy-efficient software, the role of developers on energy efficient software systems and tools for detecting and refactoring code smells/energy bugs; to human aspects like its impact on software sustainability or the adaptation of ACM/IEEE guidelines for student and professional education and; and an economics-driven architectural evaluation for sustainability. Also aspects as the elements of governance and management that organizations should consider when implementing, assessing and improving Green IT or the relationship between software sustainability and the Corporate Social Responsibility of software companies are included. The chapters are complemented by usage scenarios and experience reports on several domains as cloud applications, agile development or e-Health, among others. As a whole, the chapters provide a complete overview of the various issues related to sustainable software development. The target readership for this book includes CxOs, (e.g. Chief Information Officers, Chief Executive Officers, Chief Technology Officers, etc.) software developers, software managers, auditors, business owners, and quality professionals. It is also intended for students of software engineering and information systems, and software researchers who want to know the state of the art regarding software sustainability.

Professional IT practitioners need not only the appropriate technical skills, but also a broad understanding of the context in which they operate. This book provides a unique introduction to: social, legal, financial, organizational and ethical issues in the context of the IT industry; the role of professional codes of conduct and ethics; and key legislation. It is designed to accompany the BCS Professional Examination Core Diploma Module: Professional Issues in Information Systems Practice.

Professional Issues in Information Technology

Ethical Digital Technology in Practice

Cybertherapy

ECMLG2012-Proceedings of the 8th European Conference on Management, Leadership and Governance

Open Source Systems

Solar Tracking, Inseguimento Solare, Sol Tracking, Sol de Seguimiento : High precision solar position algorithms, programs, software and source-code for computing the solar vector, solar coordinates & sun angles in Microprocessor, PLC, Arduino, PIC and PC-based sun tracking devices or dynamic sun following hardware

This book supplies both empirical evidence and scholarly analysis that exemplify successful innovation in South America in the field of sustainability education. Examining the issues from a three-fold perspective, of national policy, regional planning and grassroots projects in schools and communities, the volume offers a comprehensive overview of the contemporary situation in Brazil, Chile, Bolivia, Argentina and Venezuela. It provides case studies as detailed illustrations of the recipe for success as well as to inform researchers and practitioners of the kinds of obstacles and challenges they might face in seeking to manifest sustainability. A good deal of the research and scholarly studies in the field of education for sustainability and sustainable development is underpinned by 'Western' norms and culture. This book draws on that literature, yet also teases out features in the case studies that are particular to the region. South America itself encompasses a rich variety of natural and cultural environments—within individual nations as much as continent-wide. This diversity is a recurring theme in the book. The volume's three sections provide first a general survey, enriched with material from studies conducted in a number of different polities. The second section covers developments in Brazil, South America's largest nation and one that exhibits many of the features of education for sustainability found across the continent. Part three sets out and explores future trends. As with other books in the Schooling for Sustainable Development series, this volume will add impetus to scholarly exchange as well as contributing insights on education policy and curriculum changes across South American communities that exist in an increasingly globalized world.

Ethical Digital Technology in PracticeCRC Press

Professionalism is arguably more important in some occupations than in others. It is vital in some because of the life and death decisions that must be made, for example in medicine. In others the rapidly changing nature of the occupation makes efficient regulation difficult and so the professional behaviour of the practitioners is central to the good functioning of that occupation. The core idea behind this book is that Information and Communication Technology (ICT) is changing so quickly that professional behaviour of its practitioners is vital because regulation will always lag behind.

Innovation Strategies for the Food Industry: Tools for Implementation, Second Edition explores how process technologies and innovations are implemented in the food industry, by i.e., detecting problems and providing answers to questions of modern applications. As in all science sectors, Internet and big data have brought a renaissance of changes in the way academics and researchers communicate and collaborate, and in the way that the food industry develops. The new edition covers emerging skills of food technologists and the integration of food science and technology knowledge into the food chain. This handbook is ideal for all relevant actors in the food sector (professors, researchers, students and professionals) as well as for anyone dealing with food science and technology, new products development and food industry. Includes the latest trend on training requirements for the agro-food industry Highlights new technical skills and profiles of modern food scientists and technologists for professional development Presents new case studies to support research activities in the food sector, including product and process innovation Covers topics on collaboration, entrepreneurship, Big Data and the Internet of Things

Smart Computing and Informatics

Safe Management of Wastes from Health-care Activities

Challenges in e-HRM

Yearbook of International Organizations 2005/2006

Internet and Virtual Reality as Assessment and Rehabilitation Tools for Clinical Psychology and Neuroscience

Policies, Actions and Educational Experiences

This expanded and completely updated edition, of the popular text reflects the major changes to communications technology since 1990. New coverage includes discussions of ATM and Frame Relay, Ethernet and Token-Ring Networks, and expanded treatment of satellite communications. There is also new material on the ATM LAN versus WAN evolution as well as new sections on LAN networking and Internetworking. Emphasis is given throughout to reflect the emergence of the Internet with timely information on TCP/IP, NetWare, and LAN applications.

This book features a selection of thoroughly refereed papers presented at two subconferences of the IFIP TC 3 Conference on Key Competencies in Informatics and Information and Communication Technologies: the IFIP WG 3.4 Conference on Key Competencies for Educating ICT Professionals, KCICTP 2014, and the IFIP WG 3.7 Conference on Information Technology in Educational Management, ITEM 2014, held in Potsdam, Germany, in July 2014. The 28 revised full papers were carefully reviewed and selected from numerous submissions. They are organized in the following topical sections: key competencies for educating ICT professionals; key competencies, learning and life transitions; key competencies and school management; and education stakeholders and key competencies.

History of Computing: Learning from the Past Why is the history of computing important? Given that the computer, as we now know it, came into existence less than 70 years ago it might seem a little odd to some people that we are concerned with its history. Isn't history about 'old things'? Computing, of course, goes back much further than 70 years with many earlier - vices rightly being known as computers, and their history is, of course, important. It is only the history of electronic digital computers that is relatively recent. History is often justified by use of a quote from George Santayana who famously said that: 'Those who cannot remember the past are condemned to repeat it'. It is arguable whether there are particular mistakes in the history of computing that we should avoid in the future, but there is some circularity in this question, as the only way we will

know the answer to this is to study our history. This book contains papers on a wide range of topics relating to the history of c- puting, written both by historians and also by those who were involved in creating this history. The papers are the result of an international conference on the History of Computing that was held as a part of the IFIP World Computer Congress in Brisbane in September 2010.

This is an important book. Ethics is not an easy topic, and arguably the ethics of IT is less so—not leastdue to its potential for developing and evolving in ways that are either unforeseen or unimaginable . . . . Use this book as a practical resource, an informative and educational source of material in developing expertise, but also as an invaluable toolkit to support practical application of ethical thinking. —Declan Brady, President of the Irish Computer Society and a member of the Board of Directors of the Council of European Professional Informatics Societies Digital technology is about people. It is about those who plan, develop and implement applications which other people use and are affected by. It is about the impact on all these people as well as on the world at large. Ethical Digital Technology in Practice takes a real-world perspective to explore these impacts over time and discover ways in which to promote ethical digital technology through good practice. It draws upon the author's published articles in trade magazines, professional journals and online blogs. These are synthesised into a blueprint which addresses, in a practical manner, the societal issues surrounding the increasing use and abuse of digital technology. It is a follow-up book to the author's book The Evolving Landscape of Ethical Digital Technology, which has a researcher's perspective. This book is a hands-on account of the computer revolution from 1995 to the current day when the world is increasingly dependent on digital technology. It explores some of the social and ethical issues that are part of this revolution. This is not a book about deep philosophical and technical concepts. Nor does it claim to be comprehensive. It is the author's personal account of technological change and its effects on people. It is written by a boy who was smitten by computer technology at the age of 15, became a computer professional and subsequently spent many years showing young people how to develop and use digital technology in a good way. It is a book based upon the author's engagement with practitioners, academics and students during the period as well as his continued fascination with this fantastic technology. Ethical Digital Technology in Practice is a book about the real world, of what has happened and what might happen as digital technology continues to pervade.

Key Competencies in ICT and Informatics: Implications and Issues for Educational Professionals and Management

Organization Descriptions and Cross-References

History of Computing: Learning from the Past

Conservation for a New Era

IFIP WG9.7 First Working Conference on the History of Nordic Computing (HiNC1), June 16-18, 2003, Trondheim, Norway

2nd International United Information Systems Conference, UNISCON 2008, Klagenfurt, Austria, April 22-25, 2008, Proceedings

This Festschrift, Unimagined Futures – ICT Opportunities and Challenges, is the first Festschrift in the IFIP AICT series. It examines key challenges facing the ICT community today. While addressing the contemporary challenges, the book provides the opportunity to look back to help understand the contemporary scene and identify appropriate future responses to them. Experts in different areas of the ICT scene have contributed to this IFIP 60th anniversary book, which will be a key input to the ICT community worldwide on setting policy priorities and agendas for the coming decade. In addition, a number of contributions look specifically at the role of professionals and of national, regional, and global organizations in disseminating the benefits of ICT to humanity worldwide.

Recoge: 1. Introduction - 2.E-skills certification - 3. Widely applied e-skills certification systems - 4. Future of e-skills certification - 5. Recommendations - 6. Glossary.

A typical characterization of EuroSPI is reflected in a statement made by a c- pany: ". . . the biggest value of EuroSPI lies in its function as a European knowledge and experience exchange mechanism for SPI and innovation. " Since its beginning in 1994 in Dublin, the EuroSPI initiative has outlined that there is not a single silver bullet to solve SPI issues, but that you need to understand a c- bination of different SPI methods and approaches to achieve concrete benefits. The- fore each proceedings volume covers a variety of different topics, and at the conf- ence we discuss potential synergies and the combined use of such methods and - proaches. These proceedings contain selected research papers for five topics: Section I: SPI Tools Section II: SPI Methods Section III: SPI in SMEs Section IV: Economic Aspects of SPI Section V: The Future of SPI Section I presents studies on SPI tools. The authors provide an insight into new tools which can be used for SPI. Willem Bekkers et al. present a new assessment method and tool for software product management. Ismael Edrei-Espinosa-Curiel et al. illustrate a graphical approach to support the teaching of SPI. Paul Clarke and coworkers deal with an analysis and a tool to help real adoption of standards like ISO 12207 and they focus on SPI implementation and practices. Esparanca Amengual et al. present a new team-based assessment method and tool.

The book addresses the main issues concerned with the new development of learning processes, innovative pedagogical changes, the effects of new technologies on education, future learning content, which aims to gather the newest concepts, research and best practices on the frontiers of technology enhanced learning from the aspects of learning, pedagogies, and technologies in learning in order to draw a picture of technology enhanced learning in the near future. Some issues like "e-learning ... m-learning ... u-learning – innovative approaches," "the Framework and Method for Understanding the New Generation Students," "Context-aware Mobile Role Playing Game for Learning," " Pedagogical issues in content creation and use: IT literacy through Spoken Tutorials," "Supporting collaborative knowledge construction and discourse in the classroom," "Digital Systems for Hierarchical Open Access to Education," " Using Annotated Patient Records to Teach Clinical Reasoning to Undergraduate Students of Medicine," " Utilizing Cognitive Skills Ontology for Designing Personalized Learning Environments" and "Using Interactive Mobile Technologies to Develop Operating Room Technologies Competency" are discussed in separate chapters.

Tools for Implementation

From Fundamentals to Networking

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ECMLG

Free/open Source Software Development

Slow Tech and ICT

Conservation for a New Era outlines the critical issues facing us in the 21st century, developed from the results of the World Conservation Congress in Barcelona in October 2008. The landmark publication takes on the pressing issues of today and highlights the solutions to be found through investing in nature. The book is essential reading for governments, businesses and decision makers. It provides a snapshot of the current situation, split into 21 easy-to-read sections, as well as a roadmap for the future.

This volume contains 74 papers presented at SCI 2016: First International Conference on Smart Computing and Informatics. The conference was held during 3-4 March 2017, Visakhapatnam, India and organized communally by ANITS, Visakhapatnam and supported technically by CSI Division V – Education and Research and PRF, Vizag. This volume contains papers mainly focused on applications of advanced intelligent techniques to video processing, medical imaging, machine learning, sensor technologies, and network security.

A Computer Called LEO

Concept, Research and Best Practices

Innovation Strategies in the Food Industry

Schooling for Sustainable Development in South America

Lyons Tea Shops and the World's First Office Computer

Harrod's Librarians' Glossary and Reference Book