Peer reviewed articles from the Natural Language Processing and Cognitive Science (NLPCS) 2014 meeting in October 2014 workshop. The meeting fosters interactions among researchers and practitioners in NLP by taking a Cognitive Science perspective. Articles cover topics such as artificial intelligence, computational linguistics, psycholinguistics, cognitive psychology and language learning.

Historical maps are fascinating documents and a valuable source of information for scientists of various disciplines. Many of these maps are available as scanned bitmap images, but in order to make them searchable in useful ways, a structured representation of the contained information is desirable. This book deals with the extraction of spatial information from historical maps. This cannot be expected to be solved fully automatically (since it involves difficult semantics), but is also too tedious to be done manually at scale. The methodology used in this book combines the strengths of both computers and humans: it describes efficient algorithms to largely automate information extraction tasks and pairs these algorithms with smart user interactions to handle what is not understood by the algorithm. The effectiveness of this approach is shown for various kinds of spatial documents from the 16th to the early 20th century.

Once a pristine, natural paradise, CHIMA has become a battle ground for eight animal tribes. Best friends are now enemies. The animals fight for control of a natural resource called CHI, a powerful element that is both a source of life and potential destruction. Only a few brave heroes in CHIMA understand the true nature of CHI, and the possible downfall of CHIMA that will result from its misuse. Their stories, and the stories of those who seek to destroy them, are known as... THE LEGENDS OF CHIMA. The third volume in the hit series continues the adventures of Laval and his fellow members of the Lion tribe as they fight against Prince Cragger & the Crocodile tribe to preserve the balance of the mysterious force known as Chi. An informal and highly accessible writing style, a simple treatment of mathematics, and clear guide to applications, have made this book a classic text in electrical and electronic engineering. Students will find it both readable and comprehensive. The fundamental ideas relevant to the understanding of the electrical properties of materials are emphasized; in addition, topics are selected in order to explain the operation of devices having applications (or possible future applications) in engineering. The mathematics, kept deliberately to a minimum, is well within the grasp of a second-year student. This is achieved by choosing the simplest model that can display the essential properties of a phenomenom, and then examining the difference between the ideal and the actual behaviour. The whole text is designed as an undergraduate course. However most individual sections are self contained and can be used as background reading in graduate courses, and for interested persons who want to explore advances in microelectronics, lasers, nanotechnology and several other topics that impinge on modern life.

This book constitutes the refereed proceedings of the 17th Conference on Artificial Intelligence in Medicine, AIME 2019, held in Poznan, Poland, in June 2019. The 22 revised full and 31 short papers presented were carefully reviewed and selected from 134 submissions. The papers are organized in the following topical sections: deep learning; simulation; knowledge representation; probabilistic models; behavior monitoring; clustering, natural language processing, and decision support; feature selection; image processing; general machine learning; and unsupervised learning.

Foreword. A transformed scientific method. Earth and environment. Health and wellbeing.

Scientific infrastructure. Scholarly communication.

Vejledning om anvendelse af forskellige målemetoder, med det formål at forbedre den internationale sammenlignelighed af fattigdomsstatistikker.

How did the human brain with all its manifold capacities evolve from basic functions in simple organisms that lived nearly a billion years ago? John Allman addresses this question in Evolving Brains, a provocative study of brain evolution that introduces readers to some of the most exciting developments in science in recent years. This collection of short expository, critical and speculative texts offers a field guide to the cultural, political, social and aesthetic impact of software. Experts from a range of disciplines each take a key topic in software and the understanding of software, such as algorithms and logical structures.

Engineering DigestJournal of Scientific and Industrial ResearchDiesel Progress Engines & DrivesWorld FishingMarine Diesel Basics 1Maintenance, Lay-up, winter Protection, Tropical Storage, Spring RecommissionVoyage Press Seeing is Understanding. The first VISUAL guide to marine diesel systems on recreational boats. Step-by-step instructions in clear, simple drawings explain how to maintain, winterize and recommission all parts of the system - fuel deck fill - engine - batteries - transmission - stern gland - propeller. Book one of a new series. Canadian author is a sailor and marine mechanic cruising aboard his 36-foot steel-hulled Chevrier sloop. Illustrations: 300+ drawings Pages: 222 pages Published: 2017 Format: softcover Category: Inboards, Gas & Diesel

Over the past several decades, new scientific tools and approaches for detecting microbial species have dramatically enhanced our appreciation of the diversity and abundance of the microbiota and its dynamic interactions with the environments within which these microorganisms reside. The first bacterial genome was sequenced in 1995 and took more than 13 months of work to complete. Today, a microorganism's entire genome can be sequenced in a few days. Much as our view of the cosmos was forever altered in the 17th century with the invention of the telescope, these genomic technologies, and the observations derived from them, have fundamentally transformed our appreciation of the microbial world around us. On June 12 and 13, 2012, the Institute of Medicine's (IOM's) Forum on Microbial Threats convened a public workshop in Washington, DC, to discuss the scientific tools and approaches being used for detecting and characterizing microbial species, and the roles of microbial genomics and metagenomics to better understand the culturable and unculturable microbial world around us. Through invited presentations and discussions, participants examined the use of microbial genomics to explore the diversity, evolution, and adaptation of microorganisms in a wide variety of environments; the molecular mechanisms of disease emergence and epidemiology; and the ways that genomic technologies are being applied to disease outbreak trace back and microbial surveillance. Points that were emphasized by many participants included the need to develop robust standardized sampling protocols, the importance of having the appropriate metadata, data analysis and data management challenges, and information sharing in real time. The Science and Applications of Microbial Genomics summarizes this workshop. This densely illustrated, hands-on guide to diesel engine maintenance, troubleshooting, and repair renders its subject more user-friendly than ever before. Finally, boatowners who grew up with gas engines can set aside their fears about tinkering with diesels, which are safer and

increasingly more prevalent. As in other volumes in the International Marine Sailboat Library, every step of every procedure is illustrated, so that users can work from the illustrations alone. The troubleshooting charts in the second chapter--probably the most comprehensive ever published--are followed by system-specific chapters, allowing readers to quickly diagnose problems, then turn to the chapter with solutions. Diesel engine systems covered include: mechanical; oil; fresh- and raw-water cooling; low- and high-pressure fuel; exhaust; starting; charging; transmission and stern gear.

Depicting the pioneering spirit of geophysics, this memoir recounts Antarctic field operations in 1970–71 acquiring ice thickness data with radar, gravity, and magnetometer measurements. The data collected now underpin models of ice behavior used to assess climate change. The orderly Sweet-Williams are dismayed at their son's fondness for the messy pastime of gardening.

The specialist contributors to Geomorphological Techniques have thoroughly augmented and updated their original, authoritative coverage with critical evaluations of major recent developments in this field. A new chapter on neotectonics reflects the impact of developments in tectonic theory, and heavily revised sections deal with advances in remote sensing, image analysis, radiometric dating, geomorphometry, data loggers, radioactive tracers, and the determination of pore water pressure and the rates of denudation.

Tipping points are zones or thresholds of profound changes in natural or social conditions with very considerable and largely unforecastable consequences. Tipping points may be dangerous for societies and economies, especially if the prevailing governing arrangements are not designed either to anticipate them or adapt to their arrival. Tipping points can also be transformational of cultures and behaviours so that societies can learn to adapt and to alter their outlooks and mores in favour of accommodating to more sustainable ways of living. This volume examines scientific, economic and social analyses of tipping points, and the spiritual and creative approaches to identifying and anticipating them. The authors focus on climate change, ice melt, tropical forest drying and alterations in oceanic and atmospheric circulations. They also look closely at various aspects of human use of the planet, especially food production, and at the loss of biodiversity, where alterations to natural cycles may be creating convulsive couplings of tipping points. They survey the various institutional aspects of politics, economics, culture and religion to see why such dangers persist.

Microbial Forensics, Third Edition, serves as a complete reference on the discipline, describing the advances, challenges and opportunities that are integral in applying science to help solve future biocrimes. New chapters include: Microbial Source Tracking, Clinical Recognition, Bioinformatics, and Quality Assurance. This book is intended for a wide audience, but will be indispensable to forensic scientists and researchers interested in contributing to the growing field of microbial forensics. Biologists and microbiologists, the legal and judicial system, and the international community involved with Biological Weapons Treaties will also find this volume invaluable. Presents new and expanded content that includes a statistical analysis of forensic data, legal admissibility and standards of evidence Discusses actual cases of forensic bioterrorism Includes contributions from editors and authors who are leading experts in the field, with primary experience in the application of this fast-growing discipline Clinical Neurotoxicology offers accurate, relevant, and comprehensive coverage of a field that has grown tremendously in the last 20 years. You'll get a current symptomatic approach to treating disorders caused by neurotoxic agents, environmental factors—such as heavy metals and pesticides—and more. Apply discussions of cellular and molecular processes and pathology to clinical neurology. Leading authorities and up-and-coming clinical neurotoxicologists present their expertise on wide-ranging, global subjects and debate controversies in the specialty, including Gulf War

Syndrome. Provides a complete listing of neurotoxic agents—from manufactured to environmental—so you get comprehensive, clinical coverage. Covers how toxins manifest themselves according to age and co-morbidity so that you can address the needs of all your patients. Offers broad and in-depth coverage of toxins from all over the world through contributions by leading authorities and up-and-coming clinical neurotoxicologists. Features discussion of controversial and unusual topics such as Gulf War Syndrome, Parkinson's Disease, motor neuron disease, as well as other issues that are still in question.

"This book presents case studies, literature reviews, ethnographies, and frameworks supporting the emerging technologies of RFID implants while also highlighting the current and predicted social implications of human-centric technologies"--Provided by publisher.

This book explains why AI is unique, what legal and ethical problems it could cause, and how we can address them. It argues that AI is unlike any other previous technology, owing to its ability to take decisions independently and unpredictably. This gives rise to three issues: responsibility--who is liable if AI causes harm; rights--the disputed moral and pragmatic grounds for granting AI legal personality; and the ethics surrounding the decision-making of AI. The book suggests that in order to address these questions we need to develop new institutions and regulations on a crossindustry and international level. Incorporating clear explanations of complex topics, Robot Rules will appeal to a multi-disciplinary audience, from those with an interest in law, politics and philosophy, to computer programming, engineering and neuroscience. A genuine evidence-based text for optimum pain relief in various chronic conditions Contributes an important advance in the practice of pain management providing the information on which to build more coherent and standardised strategies for relief of patient suffering Answers questions about which are the most effective methods, AND those which are not effective yet continue to be used Includes discussion of the positive and the negative evidence, and addresses the grey areas where evidence is ambivalent Written by the world's leading experts in evidence-based pain management this is a seminal text in the field of pain

This book provides a comprehensive overview of the field of software processes, covering in particular the following essential topics: software process modelling, software process and lifecycle models, software process management, deployment and governance, and software process improvement (including assessment and measurement). It does not propose any new processes or methods; rather, it introduces students and software engineers to software processes and life cycle models, covering the different types ranging from "classical", plan-driven via hybrid to agile approaches. The book is structured as follows: In chapter 1, the fundamentals of the topic are introduced: the basic concepts, a historical overview, and the terminology used. Next, chapter 2 covers the various approaches to modelling software processes and lifecycle models, before chapter 3 discusses the contents of these models, addressing plandriven, agile and hybrid approaches. The following three chapters address various aspects of using software processes and lifecycle models within organisations, and consider the management of these processes, their assessment and improvement, and the measurement of both software and software processes. Working with software processes normally involves various tools, which are the focus of chapter 7, before a

look at current trends in software processes in chapter 8 rounds out the book. This book is mainly intended for graduate students and practicing professionals. It can be used as a textbook for courses and lectures, for self-study, and as a reference guide. When used as a textbook, it may support courses and lectures on software processes, or be used as complementary literature for more basic courses, such as introductory courses on software engineering or project management. To this end, it includes a wealth of examples and case studies, and each chapter is complemented by exercises that help readers gain a better command of the concepts discussed.

This practically oriented book provides an up-to-date overview of all significant aspects of the pathogenesis of sepsis and its management, including within the intensive care unit. Readers will find information on the involvement of the coagulation and endocrine systems during sepsis and on the use of biomarkers to diagnose sepsis and allow early intervention. International clinical practice guidelines for the management of sepsis are presented, and individual chapters focus on aspects such as fluid resuscitation, vasopressor therapy, response to multiorgan failure, antimicrobial therapy, and adjunctive immunotherapy. The closing section looks forward to the coming decade, discussing novel trial designs, sepsis in low- and middle-income countries, and emerging management approaches. The book is internatio nal in scope, with contributions from leading experts worldwide. It will be of value to residents and professionals/practitioners in the fields of infectious diseases and internal medicine, as well as to GPs and medical students.

"In this book, Andy Baxevanis and Francis Ouellette . . . haveundertaken the difficult task of organizing the knowledge in thisfield in a logical progression and presenting it in a digestibleform. And they have done an excellent job. This fine text will make a major impact on biological research and, in turn, on progress inbiomedicine. We are all in their debt." —Eric Lander from the Foreword Reviews from the First Edition "...provides a broad overview of the basic tools for sequenceanalysis ... For biologists approaching this subject for the firsttime, it will be a very useful handbook to keep on the shelf afterthe first reading, close to the computer." —Nature Structural Biology "...should be in the personal library of any biologist who usesthe Internet for the analysis of DNA and protein sequencedata." —Science "...a wonderful primer designed to navigate the novice throughthe intricacies of in scripto analysis ... The accomplished genesearcher will also find this book a useful addition to theirlibrary ... an excellent reference to the principles ofbioinformatics." —Trends in Biochemical Sciences This new edition of the highly successful Bioinformatics: A Practical Guide to the Analysis of Genes and Proteinsprovides a sound foundation of basic concepts, with practical discussions and comparisons of both computational tools and databases relevant to biological research. Equipping biologists with the modern tools necessary to solvepractical problems in sequence data analysis, the Second Editioncovers the broad spectrum of topics in bioinformatics, ranging fromInternet concepts to predictive algorithms used on sequence, structure, and expression data. With chapters written by experts in the field, this up-to-date reference thoroughly covers vitalconcepts and is appropriate for both the novice and the experienced practitioner. Written in clear, simple language, the book isaccessible to users without an advanced mathematical or computerscience background. This new edition includes: All new end-of-chapter Web resources, bibliographies, and problem sets Accompanying Web site containing the answers to the problems, as well as links to relevant Web resources New coverage of comparative genomics, large-scale genomeanalysis, sequence assembly, and expressed sequence tags A glossary of commonly used terms in bioinformatics andgenomics Bioinformatics: A Practical Guide to the Analysis of Genesand Proteins, Second Edition is essential reading

forresearchers, instructors, and students of all levels in molecularbiology and bioinformatics, as well as for investigators involved in genomics, positional cloning, clinical research, and computational biology.

With rates of obesity soaring to epidemic proportions, this reference strives to unearth new treatment regimens and pharmaceuticals for the prevention and treatment of obesity. Offering the latest recommendations and research from the most respected leaders in the field, the Second Edition compiles the most noteworthy studies on the evaluation and management of obese patients.

The four-volume set LNCS 3480-3483 constitutes the refereed proceedings of the International Conference on Computational Science and Its Applications, ICCSA 2005, held in Singapore in May 2005. The four volumes present a total of 540 papers selected from around 2700 submissions. The papers span the whole range of computational science, comprising advanced applications in virtually all sciences making use of computational techniques as well as foundations, techniques, and methodologies from computer science and mathematics, such as high performance computing and communication, networking, optimization, information systems and technologies, scientific visualization, graphics, image processing, data analysis, simulation and modelling, software systems, algorithms, security, multimedia etc.

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