

Download File Turbo Prolog Primer Paperback Free Download Pdf

Adventure in Prolog Dr. Dobb's Journal of
Software Tools for the Professional Programmer
The Art of Prolog, second edition Programming
in Prolog A Primer on Scientific Programming
with Python Machine Design Beginning Artificial
Intelligence with the Raspberry Pi The Reasoned
Schemer, second edition Programming in Prolog
Knife of Dreams Rules for Radicals Why Does
the World Exist Computational Linguistics P-
Prolog, a Parallel Logic Programming Language
Neural Network Methods in Natural Language
Processing SQL Primer Data Visualization
Natural Language Processing and
Computational Linguistics 2 Beginning Linux
Programming Logic for Computer Scientists A

Semantic Web Primer, third edition Introducing
Erlang Prolog Logic Grammars Artificial
Intelligence with Python Once I Was You
Programmer's Journal PC Tech Journal British
Book News LISP Head First C Logic for
Computer Science Girl in Pieces Building Expert
Systems in Prolog Software and Mind The Month
that Changed the World Computer Language
Seven Languages in Seven Weeks Introduction
to Machine Learning Micro-PROLOG

Logic grammars have found wide application
both in natural language processing and in
formal applications such as compiler writing.
This book introduces the main concepts

involving natural and formal language processing in logic programming, and discusses typical problems which the reader may encounter, proposing various methods for solving them. The basic material is presented in depth; advanced material, involving new logic grammar formalisms and applications, is presented with a view towards breadth. Major sections of the book include: grammars for formal language and linguistic research, writing a simple logic grammar, different types of logic grammars, applications, and logic grammars and concurrency. This book is intended for those interested in logic programming, artificial intelligence, computational linguistics, Fifth Generation computing, formal languages and compiling techniques. It may be read profitably by upper-level undergraduates, post-graduate students, and active researchers on the above-named areas. Some familiarity with Prolog and logic programming would be helpful; the authors, however, briefly describe Prolog and its

relation to logic grammars. After reading Logic Grammars, the reader will be able to cope with the ever-increasing literature of this new and exciting field. Dedicating a chapter to every day of July 1914, the author retraces the actions that led to World War I, beginning with the assassination of Archduke Franz Ferdinand and following leaders of the time as they escalated the crisis. An understanding of logic is essential to computer science. This book provides a highly accessible account of the logical basis required for reasoning about computer programs and applying logic in fields like artificial intelligence. The text contains extended examples, algorithms, and programs written in Standard ML and Prolog. No prior knowledge of either language is required. The book contains a clear account of classical first-order logic, one of the basic tools for program verification, as well as an introductory survey of modal and temporal logics and possible world semantics. An introduction to intuitionistic logic as a basis for

an important style of program specification is also featured in the book. A new edition of the widely used guide to the key ideas, languages, and technologies of the Semantic Web The development of the Semantic Web, with machine-readable content, has the potential to revolutionize the World Wide Web and its uses. A Semantic Web Primer provides an introduction and guide to this continuously evolving field, describing its key ideas, languages, and technologies. Suitable for use as a textbook or for independent study by professionals, it concentrates on undergraduate-level fundamental concepts and techniques that will enable readers to proceed with building applications on their own and includes exercises, project descriptions, and annotated references to relevant online materials. The third edition of this widely used text has been thoroughly updated, with significant new material that reflects a rapidly developing field. Treatment of the different languages (OWL2, rules) expands

the coverage of RDF and OWL, defining the data model independently of XML and including coverage of N3/Turtle and RDFa. A chapter is devoted to OWL2, the new W3C standard. This edition also features additional coverage of the query language SPARQL, the rule language RIF and the possibility of interaction between rules and ontology languages and applications. The chapter on Semantic Web applications reflects the rapid developments of the past few years. A new chapter offers ideas for term projects. Additional material, including updates on the technological trends and research directions, can be found at <http://www.semanticwebprimer.org>. version of Winston and Horns best-selling introduction to the Lisp programming language and to Lisp-based applications, many of which are possible as a result of advances in Artificial Intelligence technology. The Knowledge You Need The new edition retains the broad coverage of previous editions that has made this book popular both

with beginners and with more advanced readers -- coverage ranging from the basics of the language to detailed examples showing Lisp in practice. Based on the CommonLisp standard, this book also introduces CommonLisps object system, CLOS, and the productivity-promoting techniques enabled by object-oriented programming. Application examples drawn from expert systems, natural language interfaces, and symbolic mathematics are featured, and new applications dealing with probability bounds, project simulation, and visual object recognition are introduced. Special Features of this Edition

- *Based on extensive teaching experience
- *Explains key problem solving paradigms, such as search, forward chaining, and problem reduction
- *Discusses constraint propagation, backward chaining, and key ideas in Prolog
- *Emphasizes procedure and data abstraction, and other points

o The book serves as a first introduction to computer programming of scientific applications, using the high-level

Python language. The exposition is example and problem-oriented, where the applications are taken from mathematics, numerical calculus, statistics, physics, biology and finance. The book teaches "Matlab-style" and procedural programming as well as object-oriented programming. High school mathematics is a required background and it is advantageous to study classical and numerical one-variable calculus in parallel with reading this book. Besides learning how to program computers, the reader will also learn how to solve mathematical problems, arising in various branches of science and engineering, with the aid of numerical methods and programming. By blending programming, mathematics and scientific applications, the book lays a solid foundation for practicing computational science. From the reviews: Langtangen ... does an excellent job of introducing programming as a set of skills in problem solving. He guides the reader into thinking properly about producing program logic

and data structures for modeling real-world problems using objects and functions and embracing the object-oriented paradigm. ... Summing Up: Highly recommended. F. H. Wild III, Choice, Vol. 47 (8), April 2010 Those of us who have learned scientific programming in Python 'on the streets' could be a little jealous of students who have the opportunity to take a course out of Langtangen's Primer." John D. Cook, The Mathematical Association of America, September 2011 This book goes through Python in particular, and programming in general, via tasks that scientists will likely perform. It contains valuable information for students new to scientific computing and would be the perfect bridge between an introduction to programming and an advanced course on numerical methods or computational science. Alex Small, IEEE, CiSE Vol. 14 (2), March /April 2012 "This fourth edition is a wonderful, inclusive textbook that covers pretty much everything one needs to know to go from zero to fairly sophisticated

scientific programming in Python..." Joan Horvath, Computing Reviews, March 2015 The computer programming language Prolog is quickly gaining popularity throughout the world. Since Its beginnings around 1970. Prolog has been chosen by many programmers for applications of symbolic computation. including: D relational databases D mathematical logic D abstract problem solving D understanding natural language D architectural design D symbolic equation solving D biochemical structure analysis D many areas of artificial Intelligence Until now. there has been no textbook with the aim of teaching Prolog as a practical programming language. It Is perhaps a tribute to Prolog that so many people have been motivated to learn It by referring to the necessarily concise reference manuals. a few published papers. and by the orally transmitted 'folklore' of the modern computing community. However. as Prolog is beginning to be Introduced to large numbers of undergraduate

and postgraduate students. many of our colleagues have expressed a great need for a tutorial guide to learning Prolog. We hope this little book will go some way towards meeting this need. Many newcomers to Prolog find that the task of writing a Prolog program is not like specifying an algorithm in the same way as in a conventional programming language. Instead, the Prolog programmer asks more what formal relationships and objects occur in his problem. The Wheel of Time is now an original series on Prime Video, starring Rosamund Pike as Moiraine! Since its debut in 1990, The Wheel of Time® by Robert Jordan has captivated millions of readers around the globe with its scope, originality, and compelling characters. The Wheel of Time turns and Ages come and go, leaving memories that become legend. Legend fades to myth, and even myth is long forgotten when the Age that gave it birth returns again. In the Third Age, an Age of Prophecy, the World and Time themselves hang in the balance. What

was, what will be, and what is, may yet fall under the Shadow. The dead are walking, men die impossible deaths, and it seems as though reality itself has become unstable: All are signs of the imminence of Tarmon Gai'don, the Last Battle, when Rand al'Thor, the Dragon Reborn, must confront the Dark One as humanity's only hope. Unbeknownst to Rand, Perrin has made his own truce with the Seanchan. It is a deal made with the Dark One, in his eyes, but he will do whatever is needed to rescue his wife, Faile, and destroy the Shaido who captured her. Among the Shaido, Faile works to free herself while hiding a secret that might give her her freedom or cause her destruction. And at a town called Malden, the Two Rivers longbow will be matched against Shaido spears. Fleeing Ebou Dar through Seanchan-controlled Altara with the kidnapped Daughter of the Nine Moons, Mat attempts to court the woman to whom he is half-married, knowing that she will complete that ceremony eventually. But Tuon coolly leads him

on a merry chase as he learns that even a gift can have deep significance among the Seanchan Blood and what he thinks he knows of women is not enough to save him. In Caemlyn, Elayne fights to gain the Lion Throne while trying to avert what seems a certain civil war should she win the crown... In the White Tower, Egwene struggles to undermine the sisters loyal to Elaida from within... The winds of time have become a storm, and things that everyone believes are fixed in place forever are changing before their eyes. Even the White Tower itself is no longer a place of safety. Now Rand, Perrin and Mat, Egwene and Elayne, Nynaeve and Lan, and even Loial, must ride those storm winds, or the Dark One will triumph. The Wheel of Time® New Spring: The Novel #1 The Eye of the World #2 The Great Hunt #3 The Dragon Reborn #4 The Shadow Rising #5 The Fires of Heaven #6 Lord of Chaos #7 A Crown of Swords #8 The Path of Daggers #9 Winter's Heart #10 Crossroads of Twilight #11 Knife of Dreams By Robert Jordan

and Brandon Sanderson #12 The Gathering Storm #13 Towers of Midnight #14 A Memory of Light By Robert Jordan and Teresa Patterson The World of Robert Jordan's The Wheel of Time By Robert Jordan, Harriet McDougal, Alan Romanczuk, and Maria Simons The Wheel of Time Companion By Robert Jordan and Amy Romanczuk Patterns of the Wheel: Coloring Art Based on Robert Jordan's The Wheel of Time At the Publisher's request, this title is being sold without Digital Rights Management Software (DRM) applied. If you're new to Erlang, its functional style can seem difficult, but with help from this hands-on introduction, you'll scale the learning curve and discover how enjoyable, powerful, and fun this language can be. In this updated second edition, author Simon St.Laurent shows you how to write simple Erlang programs by teaching you one skill at a time. You'll learn about pattern matching, recursion, message passing, process-oriented programming, and establishing pathways for

data rather than telling it where to go. By the end of your journey, you'll understand why Erlang is ideal for concurrency and resilience. Get cozy with Erlang's shell, its command line interface Define functions, using the fun tool, to represent repeated calculations Discover atoms, pattern matching, and guards: the foundations of your program structure Delve into the heart of Erlang processing with recursion, strings, lists, and higher-order functions Create processes, send messages among them, and apply pattern matching to incoming messages Store and manipulate structured data with Erlang Term Storage and the Mnesia database Learn about Open Telecom Platform, Erlang's open source libraries and tools P-Prolog is put forward as an alternative proposal to the difficulties faced in the main research areas of parallel logic programmings, which have been studied. P-Prolog provides the advantages of guarded Horn clauses while retaining don't know non-determinism where required. This monograph

presents also an or-tree model and an implementation scheme for it, to combine and-and or- parallelism with reasonable efficiency. The model and implementation scheme discussed can be applied to P-Prolog and other parallel logic languages. First published in 1971, Rules for Radicals is Saul Alinsky's impassioned counsel to young radicals on how to effect constructive social change and know "the difference between being a realistic radical and being a rhetorical one." Written in the midst of radical political developments whose direction Alinsky was one of the first to question, this volume exhibits his style at its best. Like Thomas Paine before him, Alinsky was able to combine, both in his person and his writing, the intensity of political engagement with an absolute insistence on rational political discourse and adherence to the American democratic tradition. Learn key topics such as language basics, pointers and pointer arithmetic, dynamic memory management, multithreading, and

network programming. Learn how to use the compiler, the make tool, and the archiver. When I compare the books on expert systems in my library with the production expert systems I know of, I note that there are few good books on building expert systems in Prolog. Of course, the set of actual production systems is a little small for a valid statistical sample, at least at the time and place of this writing - here in Gennany, and in the first days of 1989. But there are at least some systems I have seen running in real life commercial and industrial environments, and not only at trade shows. I can observe the most impressive one in my immediate neighborhood. It is installed in the Telephone Shop of the Gennan Federal PTT near the Munich National Theater, and helps configure telephone systems and small PBXs for mostly private customers. It has a neat, graphical interface, and constructs and prices an individual telephone installation interactively before the very eyes of the customer. The hidden features of the system are

even more impressive. It is part of an expert system network with a distributed knowledge base that will grow to about 150 installations in every Telephone Shop throughout Gennany. Each of them can be updated individually overnight via Teletex to present special offers or to adapt the selection process to the hardware supplies currently available at the local ware houses. An accessible primer on how to create effective graphics from data This book provides students and researchers a hands-on introduction to the principles and practice of data visualization. It explains what makes some graphs succeed while others fail, how to make high-quality figures from data using powerful and reproducible methods, and how to think about data visualization in an honest and effective way. Data Visualization builds the reader's expertise in ggplot2, a versatile visualization library for the R programming language. Through a series of worked examples, this accessible primer then demonstrates how to

create plots piece by piece, beginning with summaries of single variables and moving on to more complex graphics. Topics include plotting continuous and categorical variables; layering information on graphics; producing effective “small multiple” plots; grouping, summarizing, and transforming data for plotting; creating maps; working with the output of statistical models; and refining plots to make them more comprehensible. Effective graphics are essential to communicating ideas and a great way to better understand data. This book provides the practical skills students and practitioners need to visualize quantitative data and get the most out of their research findings. Provides hands-on instruction using R and ggplot2 Shows how the “tidyverse” of data analysis tools makes working with R easier and more consistent Includes a library of data sets, code, and functions "Seven Languages in Seven Weeks" presents a meaningful exploration of seven languages within a single book. Rather than serve as a

complete reference or installation guide, the book hits what's essential and unique about each language. Not long ago" Dennis Merritt wrote one of the best books that I know of about implementing expert systems in Prolog, and I was very glad he published it in our series. The only problem is there are still some unfortunate people around who do not know Prolog and are not sufficiently prepared either to read Merritt's book, or to use this extremely productive language, be it for knowledge-based work or even for everyday programming. Possibly this last statement may surprise you if you were under the impression that Prolog was an "artificial intelligence language" with very limited application potential. Please believe this editor's statement that quite the opposite is true: for at least four years, I have been using Prolog for every programming task in which I am given the option of choosing the language. Therefore, I 'am indeed happy that Dennis Merritt has written another good book on my language of

choice, and that it meets the high standard he set with his prior book, *Building Expert Systems in Prolog*. All that remains for me to do is to wish you success and enjoyment when taking off on your *Adventure in Prolog*. *Beginning Linux Programming, Fourth Edition* continues its unique approach to teaching UNIX programming in a simple and structured way on the Linux platform. Through the use of detailed and realistic examples, students learn by doing, and are able to move from being a Linux beginner to creating custom applications in Linux. The book introduces fundamental concepts beginning with the basics of writing Unix programs in C, and including material on basic system calls, file I/O, interprocess communication (for getting programs to work together), and shell programming. Parallel to this, the book introduces the toolkits and libraries for working with user interfaces, from simpler terminal mode applications to X and GTK+ for graphical user interfaces. Advanced topics are covered in detail

such as processes, pipes, semaphores, socket programming, using MySQL, writing applications for the GNOME or the KDE desktop, writing device drivers, POSIX Threads, and kernel programming for the latest Linux Kernel. A new edition of a book, written in a humorous question-and-answer style, that shows how to implement and use an elegant little programming language for logic programming. The goal of this book is to show the beauty and elegance of relational programming, which captures the essence of logic programming. The book shows how to implement a relational programming language in Scheme, or in any other functional language, and demonstrates the remarkable flexibility of the resulting relational programs. As in the first edition, the pedagogical method is a series of questions and answers, which proceed with the characteristic humor that marked *The Little Schemer* and *The Seasoned Schemer*. Familiarity with a functional language or with the first five chapters of *The*

Little Schemer is assumed. For this second edition, the authors have greatly simplified the programming language used in the book, as well as the implementation of the language. In addition to revising the text extensively, and simplifying and revising the “Laws” and “Commandments,” they have added explicit “Translation” rules to ease translation of Scheme functions into relations. Fans of *Girl, Interrupted*, *Thirteen Reasons Why*, and *All the Bright Places* will love this New York Times bestseller. “A haunting, beautiful, and necessary book that will stay with you long after you’ve read the last page.”—Nicola Yoon, #1 New York Times bestselling author of *Everything, Everything* and *The Sun Is Also a Star* Charlotte Davis is in pieces. At seventeen she’s already lost more than most people do in a lifetime. But she’s learned how to forget. The broken glass washes away the sorrow until there is nothing but calm. You don’t have to think about your father and the river. Your best friend, who is

gone forever. Or your mother, who has nothing left to give you. Every new scar hardens Charlie’s heart just a little more, yet it still hurts so much. It hurts enough to not care anymore, which is sometimes what has to happen before you can find your way back from the edge. A deeply moving portrait of a girl in a world that owes her nothing, and has taken so much, and the journey she undergoes to put herself back together. Kathleen Glasgow's debut is heartbreakingly real and unflinchingly honest. It’s a story you won’t be able to look away from. And don’t miss Kathleen Glasgow's novels *You’d Be Home Now* and *How to Make Friends with the Dark*, both raw and powerful stories of life. Here is the book that helped popularize Prolog by making it accessible to a wide range of readers. This edition includes much new material and improved presentation. It will serve as an invaluable reference work for anyone who wants to study and use Prolog as a practical programming language. This new edition of *The*

Art of Prolog contains a number of important changes. Most background sections at the end of each chapter have been updated to take account of important recent research results, the references have been greatly expanded, and more advanced exercises have been added which have been used successfully in teaching the course. Part II, The Prolog Language, has been modified to be compatible with the new Prolog standard, and the chapter on program development has been significantly altered: the predicates defined have been moved to more appropriate chapters, the section on efficiency has been moved to the considerably expanded chapter on cuts and negation, and a new section has been added on stepwise enhancement—a systematic way of constructing Prolog programs developed by Leon Sterling. All but one of the chapters in Part III, Advanced Prolog Programming Techniques, have been substantially changed, with some major rearrangements. A new chapter on interpreters

describes a rule language and interpreter for expert systems, which better illustrates how Prolog should be used to construct expert systems. The chapter on program transformation is completely new and the chapter on logic grammars adds new material for recognizing simple languages, showing how grammars apply to more computer science examples. Neural networks are a family of powerful machine learning models and this book focuses on their application to natural language data. The first half of the book (Parts I and II) covers the basics of supervised machine learning and feed-forward neural networks, the basics of working with machine learning over language data, and the use of vector-based rather than symbolic representations for words. It also covers the computation-graph abstraction, which allows to easily define and train arbitrary neural networks, and is the basis behind the design of contemporary neural network software libraries. The second part of the book (Parts III and IV)

introduces more specialized neural network architectures, including 1D convolutional neural networks, recurrent neural networks, conditioned-generation models, and attention-based models. These architectures and techniques are the driving force behind state-of-the-art algorithms for machine translation, syntactic parsing, and many other applications. Finally, we also discuss tree-shaped networks, structured prediction, and the prospects of multi-task learning. Basic concepts. Logic programming using micro-Prolog. Core micro-Prolog. Applications of micro-Prolog. Expands the search for the origins of the universe beyond God and the Big Bang theory, exploring more bizarre possibilities inspired by physicists, theologians, mathematicians, and even novelists. Natural Language Processing (NLP) is a scientific discipline which is found at the intersection of fields such as Artificial Intelligence, Linguistics, and Cognitive Psychology. This book presents in four chapters

the state of the art and fundamental concepts of key NLP areas. Are presented in the first chapter the fundamental concepts in lexical semantics, lexical databases, knowledge representation paradigms, and ontologies. The second chapter is about combinatorial and formal semantics. Discourse and text representation as well as automatic discourse segmentation and interpretation, and anaphora resolution are the subject of the third chapter. Finally, in the fourth chapter, I will cover some aspects of large scale applications of NLP such as software architecture and their relations to cognitive models of NLP as well as the evaluation paradigms of NLP software. Furthermore, I will present in this chapter the main NLP applications such as Machine Translation (MT), Information Retrieval (IR), as well as Big Data and Information Extraction such as event extraction, sentiment analysis and opinion mining. This book introduces the notions and methods of formal logic from a computer

science standpoint, covering propositional logic, predicate logic, and foundations of logic programming. The classic text is replete with illustrative examples and exercises. It presents applications and themes of computer science research such as resolution, automated deduction, and logic programming in a rigorous but readable way. The style and scope of the work, rounded out by the inclusion of exercises, make this an excellent textbook for an advanced undergraduate course in logic for computer scientists. Addressing general readers as well as software practitioners, "Software and Mind" discusses the fallacies of the mechanistic ideology and the degradation of minds caused by these fallacies. Mechanism holds that every aspect of the world can be represented as a simple hierarchical structure of entities. But, while useful in fields like mathematics and manufacturing, this idea is generally worthless, because most aspects of the world are too complex to be reduced to simple hierarchical

structures. Our software-related affairs, in particular, cannot be represented in this fashion. And yet, all programming theories and development systems, and all software applications, attempt to reduce real-world problems to neat hierarchical structures of data, operations, and features. Using Karl Popper's famous principles of demarcation between science and pseudoscience, the book shows that the mechanistic ideology has turned most of our software-related activities into pseudoscientific pursuits. Using mechanism as warrant, the software elites are promoting invalid, even fraudulent, software notions. They force us to depend on generic, inferior systems, instead of allowing us to develop software skills and to create our own systems. Software mechanism emulates the methods of manufacturing, and thereby restricts us to high levels of abstraction and simple, isolated structures. The benefits of software, however, can be attained only if we start with low-level elements and learn to create

complex, interacting structures. Software, the book argues, is a non-mechanistic phenomenon. So it is akin to language, not to physical objects. Like language, it permits us to mirror the world in our minds and to communicate with it. Moreover, we increasingly depend on software in everything we do, in the same way that we depend on language. Thus, being restricted to mechanistic software is like thinking and communicating while being restricted to some ready-made sentences supplied by an elite. Ultimately, by impoverishing software, our elites are achieving what the totalitarian elite described by George Orwell in "Nineteen Eighty-Four" achieves by impoverishing language: they are degrading our minds. Introduction -- Supervised learning -- Bayesian decision theory - - Parametric methods -- Multivariate methods -- Dimensionality reduction -- Clustering -- Nonparametric methods -- Decision trees -- Linear discrimination -- Multilayer perceptrons -- Local models -- Kernel machines -- Graphical

models -- Brief contents -- Hidden markov models -- Bayesian estimation -- Combining multiple learners -- Reinforcement learning -- Design and analysis of machine learning experiments. "Emmy Award-winning NPR journalist Maria Hinojosa shares her personal story interwoven with American immigration policy's coming-of-age journey at a time when our country's branding went from "The Land of the Free" to "the land of invasion."-- Build real-world Artificial Intelligence applications with Python to intelligently interact with the world around you About This Book Step into the amazing world of intelligent apps using this comprehensive guide Enter the world of Artificial Intelligence, explore it, and create your own applications Work through simple yet insightful examples that will get you up and running with Artificial Intelligence in no time Who This Book Is For This book is for Python developers who want to build real-world Artificial Intelligence applications. This book is

friendly to Python beginners, but being familiar with Python would be useful to play around with the code. It will also be useful for experienced Python programmers who are looking to use Artificial Intelligence techniques in their existing technology stacks.

What You Will Learn

- Realize different classification and regression techniques
- Understand the concept of clustering and how to use it to automatically segment data
- See how to build an intelligent recommender system
- Understand logic programming and how to use it
- Build automatic speech recognition systems
- Understand the basics of heuristic search and genetic programming
- Develop games using Artificial Intelligence
- Learn how reinforcement learning works
- Discover how to build intelligent applications centered on images, text, and time series data
- See how to use deep learning algorithms and build applications based on it

In Detail

Artificial Intelligence is becoming increasingly relevant in the modern world where everything is driven by

technology and data. It is used extensively across many fields such as search engines, image recognition, robotics, finance, and so on. We will explore various real-world scenarios in this book and you'll learn about various algorithms that can be used to build Artificial Intelligence applications. During the course of this book, you will find out how to make informed decisions about what algorithms to use in a given context. Starting from the basics of Artificial Intelligence, you will learn how to develop various building blocks using different data mining techniques. You will see how to implement different algorithms to get the best possible results, and will understand how to apply them to real-world scenarios. If you want to add an intelligence layer to any application that's based on images, text, stock market, or some other form of data, this exciting book on Artificial Intelligence will definitely be your guide! Style and approach This highly practical book will show you how to implement Artificial

Intelligence. The book provides multiple examples enabling you to create smart applications to meet the needs of your organization. In every chapter, we explain an algorithm, implement it, and then build a smart application. Build a core level of competency in SQL so you can recognize the parts of queries and write simple SQL statements. SQL knowledge is essential for anyone involved in programming, data science, and data management. This book covers features of SQL that are standardized and common across most database vendors. You will gain a base of knowledge that will prepare you to go deeper into the specifics of any database product you might encounter. Examples in the book are worked in PostgreSQL and SQLite, but the bulk of the examples are platform agnostic and will work on any database platform supporting SQL. Early in the book you learn about table design, the importance of keys as row identifiers, and essential query operations. You then move into

more advanced topics such as grouping and summarizing, creating calculated fields, joining data from multiple tables when it makes business sense to do so, and more. Throughout the book, you are exposed to a set-based approach to the language and are provided a good grounding in subtle but important topics such as the effects of null value on query results. With the explosion of data science, SQL has regained its prominence as a top skill to have for technologists and decision makers worldwide. SQL Primer will guide you from the very basics of SQL through to the mainstream features you need to have a solid, working knowledge of this important, data-oriented language. What You'll Learn Create and populate your own database tables Read SQL queries and understand what they are doing Execute queries that get correct results Bring together related rows from multiple tables Group and sort data in support of reporting applications Get a grip on nulls, normalization, and other key concepts Employ

subqueries, unions, and other advanced features
Who This Book Is For Anyone new to SQL who is looking for step-by-step guidance toward understanding and writing SQL queries. The book is aimed at those who encounter SQL statements often in their work, and provides a sound baseline useful across all SQL database systems. Programmers, database managers, data scientists, and business analysts all can benefit from the baseline of SQL knowledge provided in this book. Gain a gentle introduction to the world of Artificial Intelligence (AI) using the Raspberry Pi as the computing platform. Most of the major AI topics will be explored, including expert systems, machine learning both shallow and deep, fuzzy logic control, and more! AI in action will be demonstrated using the Python language on the Raspberry Pi. The Prolog language will also be introduced and used to demonstrate fundamental AI concepts. In addition, the Wolfram language will be used as part of the deep machine learning

demonstrations. A series of projects will walk you through how to implement AI concepts with the Raspberry Pi. Minimal expense is needed for the projects as only a few sensors and actuators will be required. Beginners and hobbyists can jump right in to creating AI projects with the Raspberry Pi using this book. What You'll Learn What AI is and—as importantly—what it is not Inference and expert systems Machine learning both shallow and deep Fuzzy logic and how to apply to an actual control system When AI might be appropriate to include in a system Constraints and limitations of the Raspberry Pi AI implementation Who This Book Is For Hobbyists, makers, engineers involved in designing autonomous systems and wanting to gain an education in fundamental AI concepts, and non-technical readers who want to understand what AI is and how it might affect their lives.

corsonlearning.com