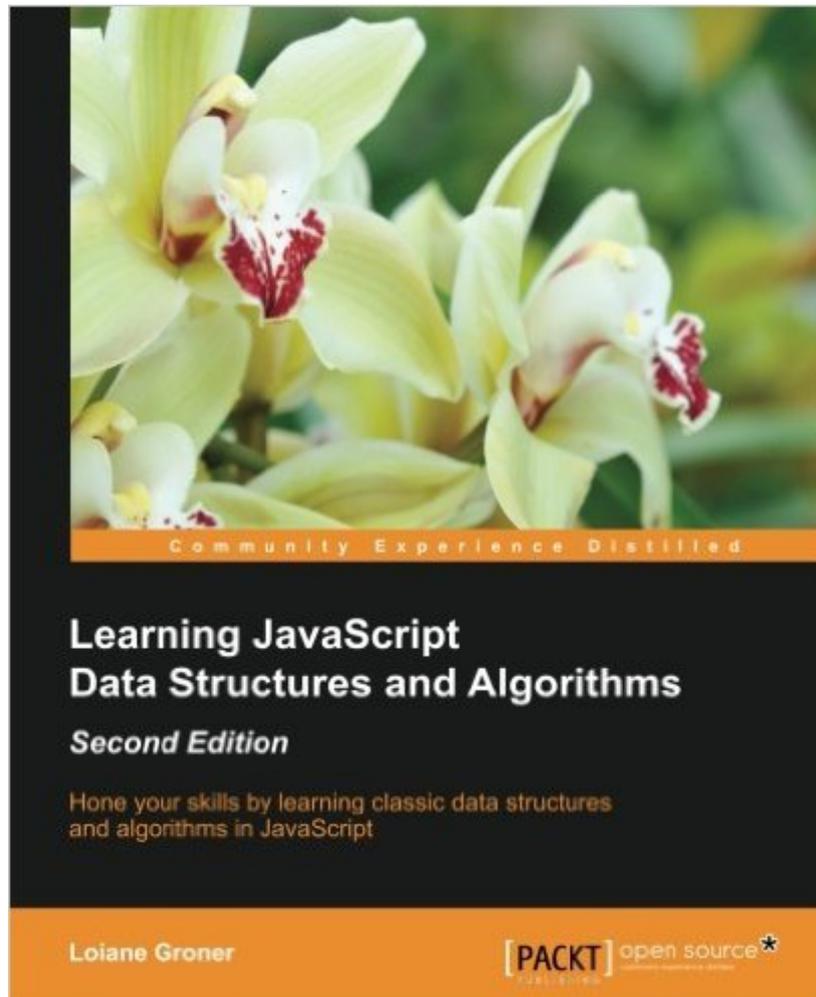# The book was found

# Learning JavaScript Data Structures And Algorithms - Second Edition

# Synopsis

Key FeaturesUnderstand common data structures and the associated algorithms, as well as the context in which they are used.Master existing JavaScript data structures such as array, set and map and learn how to implement new ones such as stacks, linked lists, trees and graphs.All concepts are explained in an easy way, followed by examples.Book DescriptionThis book begins by covering basics of the JavaScript language and introducing ECMAScript 7, before gradually moving on to the current implementations of ECMAScript 6. You will gain an in-depth knowledge of how hash tables and set data structure functions, as well as how trees and hash maps can be used to search files in a HD or represent a database. This book is an accessible route deeper into JavaScript. Graphs being one of the most complex data structures youâ ™ll encounter, weâ ™ll also give you a better understanding of why and how graphs are largely used in GPS navigation systems in social networks.Toward the end of the book, youâ ™ll discover how all the theories presented by this book can be applied in real-world solutions while working on your own computer networks and Facebook searches.What you will learnDeclare, initialize, add, and remove items from arrays, stacks, and queuesGet the knack of using algorithms such as DFS (Depth-first Search) and BFS (Breadth-First Search) for the most complex data structuresHarness the power of creating linked lists, doubly linked lists, and circular linked listsStore unique elements with hash tables, dictionaries, and setsUse binary trees and binary search treesSort data structures using a range of algorithms such as bubble sort, insertion sort, and quick sortAbout the AuthorLoiane Groner has over 10 years of experience in developing enterprise applications. She has worked at multinational companies, such as IBM, and nowadays she works as Software Development Manager at a financial institution, where she manages overseas solutions. Her areas of expertise include Java, Sencha technologies (Ext JS), and hybrid mobile development with PhoneGap and Ionic.She is passionate about technology, and she has dedicated herself to spreading knowledge in the software development community through her blog http://loiane.com, as guest speaker in IT conferences, and also as guest professor in university extension courses.While at university, she worked as teacher's assistant for 2 years for the Algorithms, Data Structures, and Computing Theory classes. She represented her university at the ACM International Collegiate Programming Contest â " Brazilian Finals (South America Regionals) and also worked as Student Delegate of SBC (Brazilian Computing Society). She won a merit award in her Senior year for being one of top three students with better GPAs in the Computer Science department and has also graduated with honors.Loiane is also the author of the books Ext JS 4 First Look, Mastering Ext JS, Mastering Ext JS - Second Edition, Sencha Architect App Development, Learning JavaScript Data Structures and Algorithms,

and JavaScript Regular Expression, all of them published by Packt Publishing.If you want to keep in touch, you can find Loiane on Facebook (https://www.facebook.com/loianegroner), Twitter (@loiane), and also on Github (https://github.com/loiane).Table of ContentsJavaScriptâ "A Quick OverviewArraysStacksQueuesLinked ListsSetsDictionaries and HashesTreesGraphsSorting and Searching AlgorithmsPatterns of AlgorithmAlgorithm Complexity

## Book Information

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## Customer Reviews

The book's title undersells it a little. The first chapter is a solid, concise introduction to using the language, and is followed by a series of chapters that each bring the reader into a better understanding of how to use both JavaScript and programming concepts in general. I see this book as a good companion for teaching Computer Science II level material in JavaScript. The examples are straightforward and logical, as are the explanations. It's hard to find fault with the book's approach to teaching because there's so little chaff to complain about. It simply teaches you what you need to know, which I found very refreshing.Overall, while the book isn't positioned as the be-all and end-all of understanding the JavaScript language, it is an overall excellent introduction to the language and implementing data structures in it.

This book is one of my favorite algorithm texts. It gets straight to the point providing you with examples of how the data structure or algorithm can be used and application of the algorithm in JavaScript. If you are studying algorithms in school, you're probably using the Cormen text or

possibly Sedgewick's or Kleinberg's. Definitely recommend using this as a supplement for those texts.If you're not taking an algorithm class and want to see how to implement common data structures and algorithms in JavaScript, or you're looking to brush-up for a job interview, or you have some JavaScript background and want to improve your skills, definitely pick this up! The price is great as well.

Fantastic book to review data structures and algorithms. Examples were well written and were easy to follow. Compare this to any typical C/C++ book and it's a night and day difference in teaching approach. I've already recommended it to others as well as a good review, especially if moving to Javascript from other languages. I've read too numerous to count books and reference guides for dozens of languages. This by far is one of the good ones.

Excellent resource into data structures from the JS point of view. Very clear and easy to follow examples for each data structure. What I like best about this book is that the data structures are associated to real examples. If you're having a hard time understanding data structure or if you want to simply get your foot into the Algo space AND have JS experience start here. One issue, and the reason I brought it down to 4 stars, was the missing Chapter 11. The book refers to the chapter but is not present. It seems that chapter was going to go into big O notation.

"Learning JavaScript Data Structures and Algorithms" provides an excellent introduction to writing and using data structures in JavaScript. The book begins by introducing the basics of JavaScript language and covering JavaScript's built-in array structures. Each chapter then builds upon this foundational knowledge to demonstrate how to build custom implementations of more sophisticated data structures and how to apply those data structures in JavaScript applications. The coverage of each data structure includes pertinent details related to the structure's behavior and issues to consider when implementing and using these structures.The PDF version of the book that Packt Publishing provided for me to review includes a Preface and ten chapters. There is an eleventh chapter and 2-page appendix that are provided as separately PDF downloads (the book provides the links to these supplementary PDFs). Code listings are black text on white background with no color syntax highlighting and no line numbers, but the author does include comments in the code listings with numbers that are referenced in explanatory text. The book refers to the downloadable code several times for additional examples not covered in the book."Learning JavaScript Data Structures and Algorithms" does a great job of concisely introducing JavaScript and is an excellent

resource for beginning JavaScript developers wishing to become stronger in the language and to apply basic data structures and related algorithms in their JavaScript applications. However, the writing on data structures and algorithms is so concise and to-the-point that I can recommend it to developers who aren't even necessarily interested in JavaScript, but would like to learn more about the nuances and trade-offs associated with implementing and using different data structures.

This book will be valid for a very long time. I loved reading it to freshen up on my algorithms, and the info on node and XAMP was helpful as well. Every web developer should read this book and have it as a reference guide when planning the implementation of their Javascript methods. You learn the most common structures and algorithms you'll need for most of your applications. Some you'll never use, but its important to know what they are and why to use other algorithms instead, which is discussed as well. You get to know, but not limited to, stacks, queues, linked-lists, sets, dictionaries, hashes, trees, graphs, and sorting and searching algorithms. You'd be hard pressed to find a need for other algorithms in the regular web development career. Great book.

Very easy to follow along with and learn. Simplified and not attempting to be so "computer science" about things. I was learning the subject in a college course using c++ and the things I was trying to understand there make more sense now after seeing the data structures created in JavaScript and explained clearly by the author. Very useful knowledge for future projects

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