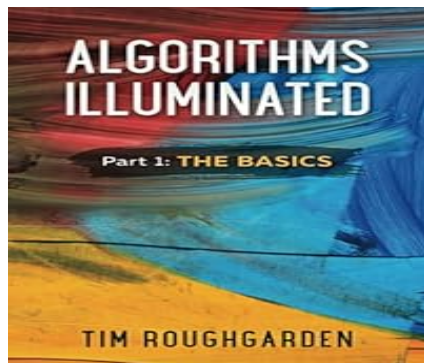Algorithms Illuminated: Part 1: The Basics : Roughgarden, Tim By Tim Roughgarden English Tim runs a great course on Coursera and this book is a companion to it.

No complaints English The book is not for complete beginners looking for a quick and easy introduction. For his research he has been awarded the ACM Grace Murray Hopper Award the Presidential Early Career Award for Scientists and Engineers (PECASE) the Kalai Prize in Computer Science and Game Theory the Social Choice and Welfare Prize the Mathematical Programming Societys Tucker Prize and the EATCS SIGACT Gouml;del Prize. He was an invited speaker at the 2006 International Congress of Mathematicians the Shapley Lecturer at the 2008 World Congress of the Game Theory Society and a Guggenheim Fellow in 2017,

I am doing a PhD in Machine Learning and found this series Amazing! The exposition of the topics is soo smooth. English I can't even read the sample because the Kindle edition isn't compatible with e ink Kindles. English Tim Roughgarden has to be my favourite teacher of all time. I've taken his Coursera course (which is highly recommended) and was one of the most enjoyable yet challenging courses I've taken online or offline at any institution, Tim really has the knack for teaching which is so rare to find in mathematics and the sciences, Go buy the book and study every page and you'll be well rewarded for your efforts: The main audience is computer science students and enthusiasts looking for a rigorous introduction to algorithm design and analysis techniques. By rigorous I mean that every step is followed English I am doing my M: in computer science but never liked the theoretical stuff of algorithms (mostly because of the bad teaching I got in the past). This book changed my viewpoint completely and I don't know how I could live without this knowledge about algorithms, The English The concepts are explained only briefly without going into much depth: This series is good as an overview.

But can be studied separately, 4 stars instead of 5 as it does not seem to contain any extra information to that presented in the course, English Tim Roughgarden is a Professor of Computer Science at Columbia University, Prior to joining Columbia he spent 15 years on the computer science faculty at Stanford following a PhD at Cornell and a postdoc at UC Berkeley: His research interests include the many connections between computer science and economics as well as the design analysis applications and limitations of algorithms, His books include Twenty Lectures on Algorithmic Game Theory (2016) and the Algorithms Illuminated book series (2017 2019). This is a clear introduction to some of the basic theory of algorithms. It is built around several practical examples (mergesort quicksort and others) that are explained clearly and whose performance is analysed clearly. Someone with almost no mathematical background and who had never seen an algorithm before would probably give this book five stars. However for anyone else it is painfully slow and long winded. English Good book but you will need to buy other books if you really want to get an in depth understanding of the topics, English Accessible no nonsense and programming language agnostic introduction to algorithms, Includes solutions to all quizzes and selected problems and a series of YouTube videos by the author accompanies the book. Part 1 covers asymptotic analysis and big O notation divide and conquer algorithms and the master method randomized

algorithms and several famous algorithms for sorting and selection. Algorithms Illuminated: Part 1: The Basics : Roughgarden Tim.

. Manages to convey complex topics in very understandable way. I have the whole series.Sc. Also there's a dire lack of real life use cases/examples