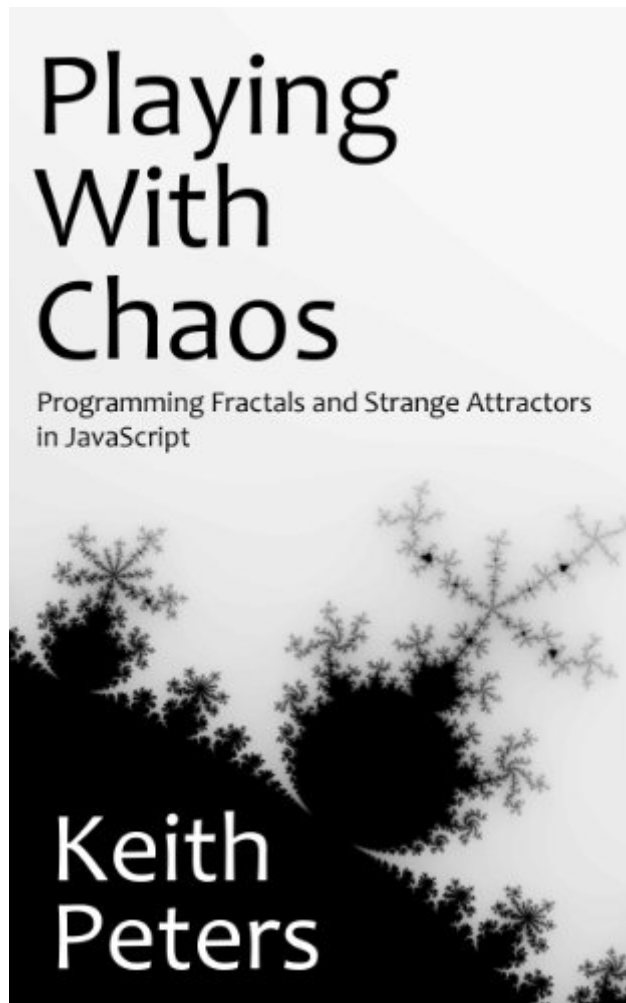# Playing With Chaos: Programming Fractals And Strange Attractors In JavaScript

Synopsis

This book, as its name implies, is about playing with fractals, strange attractors and chaos theory. By "playing" is meant writing computer programs that will generate fractals and other related forms. By learning the principles behind the shapes and the code that creates these images, you will gain a far greater understanding of and appreciation for the subject. You will also be able to experiment with these concepts on a level that you could probably never achieve if you were just randomly tweaking some sliders in someone else's application.JavaScript was chosen for the programming language in this book for multiple reasons.First, JavaScript is free, open, cross-platform, doesn't require any special programming environment, and (with HTML5 running in modern browsers) is powerful enough to do most of the computation and rendering that will be needed. Chances are that the computer you are currently using has everything you need to create and run almost all of the examples in this book. All that is required is a text editor and a modern browser -- any of the latest versions of Internet Explorer, Google Chrome, Firefox, Safari, or Opera.Second, notwithstanding a few oddities, JavaScript is a relatively easy language to pick up and become productive in very quickly. While I am assuming you have some basic programming experience, you won't need to have an extensive background in JavaScript itself to get the examples up and running. Chances are, no matter what programming language you might be familiar with, you will be able to get up to speed with the code in this book rather quickly, even if you've never touched JavaScript before.Finally, the intent of this book is not to supply you with a bunch of programs that you blindly copy and run. The idea is that you will understand what is happening in the code and why, and use the example programs as a starting point for your own explorations. As such, this can also include converting the code to the language and platform of your choice. JavaScript's syntax is simple enough that the examples should be readily translatable into most other currently popular languages.

Book Information

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Customer Reviews

This is a highly readable, highly viewable look at the beautiful things that a bit of programming can produce, without needing any special tools. Like many people, I started programming doing graphics with simple code. This would be a *great* way to explore the fun side of programming for someone starting out. The code is very approachable and clean - things that are hard can be skipped and come back to. Also the code is totally ready for experimenting with, it's always amazing what changing a few parameters can bring regardless of how long you've been at it.I would recommend this not only to people starting out though. It really is a great way for a seasoned programmer to get back to the basics of what is so compelling about code. Simple things make amazing things, and these things are inherent in the relationships of amounts. It also reminds us, in these days of so many devices, OSs, libraries, frameworks -- that we can still start from nothing and very quickly have something. Most importantly it reminds us how fun programming can be.Keith is one of those people who can make hard things clear without skipping important details. He not only convinces you that something like diffusion-limited aggregation is interesting, but motivates you to try mucking with it and convince yourself.Can't recommend this enough. It is the best read/manual I've seen on this subject, and the only one I've seen at such an impulse price. Set aside a weekend and treat your busy mind to some candy.

This is a great book. Keith Peters goes through enough of the theory and history in plain English to understand the context of the code but not to bore the reader. The examples are extremely fun to code and play around with.

In this book you can learn how to make several fractal examples, and understand its background.I

recommend it as graduate text

great!!!!!!!

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