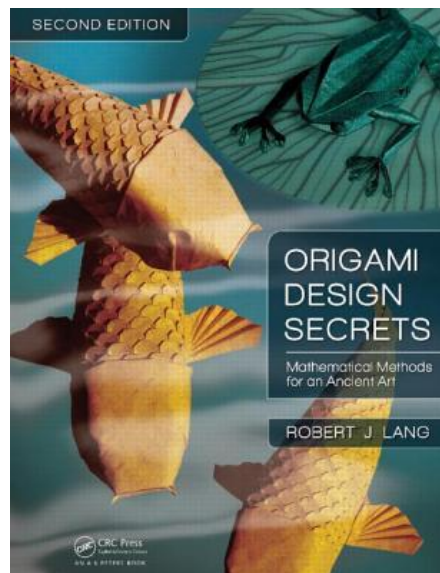




Origami Design Secrets: Mathematical Methods for an Ancient Art

Robert J. Lang

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The *magnum opus* of one of the world's leading origami artists, the second edition of **Origami Design Secrets** reveals the underlying concepts of origami and how to create original origami designs. Containing step-by-step instructions for 26 models, this book is not just an origami cookbook or list of instructions--it introduces the fundamental building blocks of origami, building up to advanced methods such as the combination of uniaxial bases, the circle/river method, and tree theory. With corrections and improved illustrations, this new expanded edition also covers uniaxial box pleating, introduces the new design technique of hex pleating, and describes methods of generalizing polygon packing to arbitrary angles.

With coverage spanning the foundations of origami construction and advanced methods using both paper and pencil and custom-built free software, **Origami Design Secrets** helps readers cultivate the intuition and skills necessary to develop their own designs. It takes them beyond merely following a recipe to crafting a work of art.

Origami Design Secrets: Mathematical Methods for an Ancient Art Details

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From Reader Review Origami Design Secrets: Mathematical Methods for an Ancient Art for online ebook

Jacob Kanev says

Tells you not only how to fold origami models, but how to design them. Wonderful. Nothing more to be said.

Arthur Quintão says

TreeMaker - program (software) for the design of origami bases.

Nguyen says

Very good

Gabriel says

Be forewarned, this is NOT your average “20 origami designs for beginners!” book. The few patterns illustrated are there as examples for the text, which is substantial — and quite intelligent. The author (possibly the only living professional full-time origamist in the world — seriously, he makes a living just folding paper) does an admirable job of analyzing advanced theories of origami. As one example, the cover model - a fish *covered in individual scales* (from one piece of square paper!) – leads a chapter on how to pre-embed pattern grids into regions destined for specific surfaces. Really eye-opening possibilities here.

Joaquin says

I feel that this book has left me with a deep understanding of all of these silly, seemingly random folds I've been doing for decades. I get it now, I might not be able to design my own arthropod, or to do the math in the book, but I understand the principles and that leaves me inspired and with a lot of room to become a better origami folder.

This book is extremely dense. By the last two chapters, I simply had to skip reading some of the extremely complex and math-based solutions to complex folds, since there was no use trying to remember that unless I was designing my own model at the time. But the first several chapters cover incredibly useful tools. I'm also now able to better visualize how a crease pattern will collapse and what could come out of it.

If you like folding complex models, and feel like you want to understand more of how these shapes come to be, instead of simple step-by-steps to arrive at a final form, this book is a must. I feel tiny after reading it, it's a huge world of extreme complexity that I'll never master, but I can at least enjoy knowing a few of the key secrets.

Ben says

Excellent how-to's and theory on the more technical aspects of origami design. There's really nothing to add.

Some of the designs are less than fascinating, but this is not a diagram book. The designs are to show techniques.

Some of the designs ARE incredible though.

Carmen something says

Alright. The man easily surpasses the book and its content--just check out his website and work in the medical supply and air bag engineering fields.

And then read The People of Paper.

Jennifer says

is it fair to say you liked a book if you haven't finished it? recalled by the library, but what i read was interactive/mind expanding/fun.

Grace Bonifatti says

Superb!!

Had a lot of fun making the Baby, I'll try the Koi next time :)

Jordan Goff says

A fascinating look at how one of the world's leading origami artists design their models. It contained topics such as point splitting, circle packing, and box pleating, along with some very nice models to demonstrate the ideas in the book. It also includes the crease patterns for numerous other models, if you are skilled enough to fold a base from a crease pattern. The only problem was that Lang just about assumed that the reader had a degree in computation and number theory, which I most certainly do not, so I was pretty much lost on his chapter about tree theory. Other than that it was a great book.

Kari says

Interesting material. I am glad I figured out on my own to use papers other than origami paper and to use

very large sheets for some projects, as this topic is not covered at all.

Dogtreat says

Thank you Robert J. Lang for writing the book that didn't exist. Not only is this a very interesting and entertaining guide to origami design, it has many great models to fold along the way.

ury949 says

This is like a text book of origami theory - it could easily be turned into a college level math course. Chapters on model bases, folding techniques, creating additional points to work with (like how it's possible to make a spider with eight legs out of a paper with only four corners), creating textures (plates), asymmetrical designs, different design theories; each chapter has folding instructions for models that demonstrate examples of the concept just covered. Most of these models are advanced level and may take several hours to complete. One thing I learned when approaching a new model is to practice folding it multiple times on different sizes and weights of paper until you have achieved the skill to make a final version on a well-chosen piece of paper. Not every origami model is best made with "origami paper" that you buy at the craft store.

The shared knowledge of how to fold an origami model is not what this book is about - it is about the far less discussed tactics of designing origami models - how did anyone come up with those steps in the first place? There are many crease pattern diagrams, a chapter devoted to mathematical algorithms, and an extensive and valuable reference for when you become obsessed with paper folding, as you just might after reading this book. (Yes, I want to attempt the koi fish on the cover.)

I really like this book; I tend to like math and understand it, am logic-thinking, patient and analytical. I'd recommend this book to anyone along those characteristics. I'm not sure that it would interest everyone who picked it up. I've done origami as a kid, but it's not really been a huge hobby of mine - so don't be afraid to dive into it, just don't expect it to be a walk in the park, either.
