Elements of Information Theory
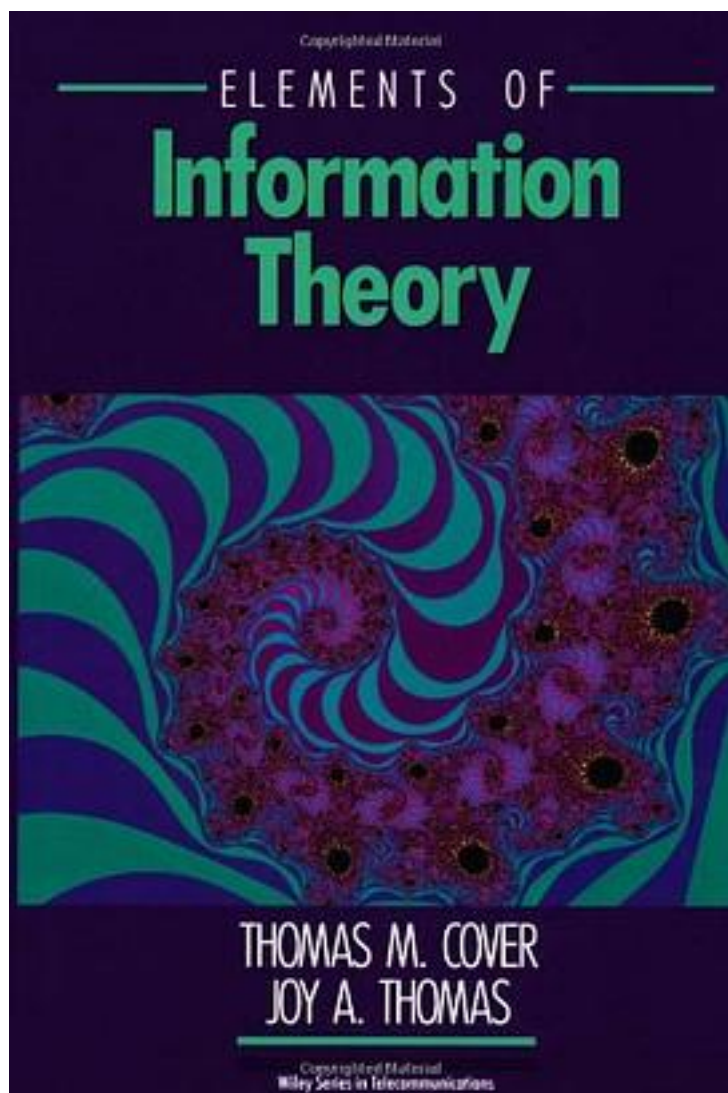
Elements of Information Theory_下载链接1_

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The Second Edition of this fundamental textbook maintains the book's tradition of clear, thought-provoking instruction. Readers are provided once again with an instructive mix of mathematics, physics, statistics, and information theory.

All the essential topics in information theory are covered in detail, including entropy, data compression, channel capacity, rate distortion, network information theory, and hypothesis testing. The authors provide readers with a solid understanding of the underlying theory and applications. Problem sets and a telegraphic summary at the end of each chapter further assist readers. The historical notes that follow each chapter recap the main points.

The Second Edition features:

* Chapters reorganized to improve teaching

* 200 new problems

* New material on source coding, portfolio theory, and feedback capacity

* Updated references

Now current and enhanced, the Second Edition of Elements of Information Theory remains the ideal textbook for upper-level undergraduate and graduate courses in electrical engineering, statistics, and telecommunications.

An Instructor's Manual presenting detailed solutions to all the problems in the book is available from the Wiley editorial department.

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JOY A. THOMAS, PHD, is the Chief Scientist at Stratify, Inc., a Silicon Valley start-up specializing in organizing unstructured information. After receiving his PhD at Stanford, Dr. Thomas spent more than nine years at the IBM T. J. Watson Research Center in Yorktown Heights, New York. Dr. Thomas is a recipient of the IEEE Charles LeGeyt Fortescue Fellowship.

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标签

计算机

数学

信息论

评论

书评

刚刚读完这本书，的确是一本好书，把信息论的主要思想，以及这些思想在包括博弈、金融、数学、物理、算法复杂性等理论的应用都讲出来了，而且能够把信息论之中蕴含的深刻科学思想讲出来，的确是一本好书。
但我认为，这本书仍然存在以下一些不足之处： 1、这并不是一本入门级别...

目前正在读，感觉写的非常好。适合本科高年级或者研究生的信息论的入门书籍。
和国内的一些教材不同，该书并非简单的堆砌定理以及数学概念，而能更深刻的介绍概念定理背后的哲学思想以及实际意义。从形而上至形而下，相当全方位的将信息论的思想展现出来。此书适合精读，熵，...

这不是一本入门书，
更不是一本适合一口气读完的书。如果你已经对信息论已经有了相当程度的理解和掌握后，这是一本非常好，非常标准的查阅手册。对于此前对信息论没什么了解的同学，不建议直接啃这本书。书中的公式和推导证明一个接着一个，解释非常精简，对于初学者来说，精...

比起同类书，是相当容易懂。但是数学的条理逻辑性就不明显了。具体说来，其他书基本都是直接先把用到的数学基础摆出来，在后面章节中直接用（如El Gamal & Kim的NETWORK INFORMATION THEORY）。而这本书不是的。
组织结构上可能有些难以把握。仅仅在通信上的应用，最起码包括...

Cover先生是牛人，IEEE的Fellow。
这本书网上也有英文的电子版。可以试一试直接看英文版。也是不错的。
讲的最后两章指明了现在和将来信息论可能的研究方向。

虽然概念比较难懂，但如果能找到切入点很容易明白。建议看 www.googlechinablog.com 的数学之美系列文章。

感觉挺明白浅显的，本科的老师用的这本教材，不过她明显没有好好备课，讲的乱七八糟的，都是自己看的，还不错，现在还记得一些印象。
不过我对翻译的书都没什么好印象，所以还是建议大家去读英文版的吧。

公认的 书中包括的内容极其丰富 并且定理推导都不算复杂
可谓是初学者接触信息论的最好教材 再加上是二版 这个是标准的美版 哎
只可惜俺没钱买 长期只能pdf……

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