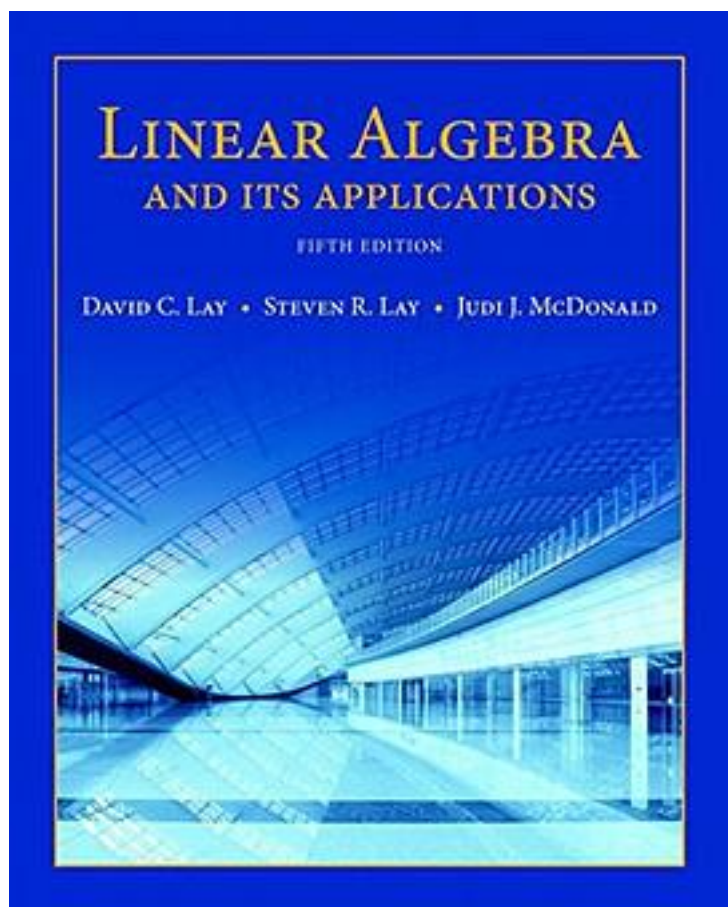


Linear Algebra and Its Applications



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著者:David C. Lay

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Linear algebra is relatively easy for students during the early stages of the course, when the material is presented in a familiar, concrete setting. But when abstract concepts are introduced, students often hit a brick wall. Instructors seem to agree that certain concepts (such as linear independence, spanning, subspace, vector space, and linear

transformations), are not easily understood, and require time to assimilate. Since they are fundamental to the study of linear algebra, students' understanding of these concepts is vital to their mastery of the subject. Lay introduces these concepts early in a familiar, concrete \mathbb{R}^n setting, develops them gradually, and returns to them again and again throughout the text so that when discussed in the abstract, these concepts are more accessible.

MyLab或是Mastering系列是在线作业系统。Access Code Card是在线作业系统的访问码，是老师和学生课堂之外网络互动及交流的平台，个人是无法使用这个平台的。请读者注意您购买的这个ISBN是不带Access Code Card的。

作者介绍:

David C. Lay holds a B.A. from Aurora University (Illinois), and an M.A. and Ph.D. from the University of California at Los Angeles. Lay has been an educator and research mathematician since 1966, mostly at the University of Maryland, College Park. He has also served as a visiting professor at the University of Amsterdam, the Free University in Amsterdam, and the University of Kaiserslautern, Germany. He has over 30 research articles published in functional analysis and linear algebra.

As a founding member of the NSF-sponsored Linear Algebra Curriculum Study Group, Lay has been a leader in the current movement to modernize the linear algebra curriculum. Lay is also co-author of several mathematics texts, including Introduction to Functional Analysis, with Angus E. Taylor, Calculus and Its Applications, with L.J. Goldstein and D.I. Schneider, and Linear Algebra Gems-Assets for Undergraduate Mathematics, with D. Carlson, C.R. Johnson, and A.D. Porter.

Professor Lay has received four university awards for teaching excellence, including, in 1996, the title of Distinguished Scholar-Teacher of the University of Maryland. In 1994, he was given one of the Mathematical Association of America's Awards for Distinguished College or University Teaching of Mathematics. He has been elected by the university students to membership in Alpha Lambda Delta National Scholastic Honor Society and Golden Key National Honor Society. In 1989, Aurora University conferred on him the Outstanding Alumnus award. Lay is a member of the American Mathematical Society, the Canadian Mathematical Society, the International Linear Algebra Society, the Mathematical Association of America, Sigma Xi, and the Society for Industrial and Applied Mathematics. Since 1992, he has served several terms on the national board of the Association of Christians in the Mathematical Sciences.

目录: Preface

A Note to Students

Chapter 1 Linear Equations in Linear Algebra

Introductory Example: Linear Models in Economics and Engineering

1.1 Systems of Linear Equations

1.2 Row Reduction and Echelon Forms

1.3 Vector Equations

1.4 The Matrix Equation $Ax = b$

1.5 Solution Sets of Linear Systems

1.6 Applications of Linear Systems

1.7 Linear Independence

1.8 Introduction to Linear Transformations

1.9 The Matrix of a Linear Transformations

1.10 Linear Models in Business, Science, and Engineering

Supplementary Exercises

Chapter 2 Matrix Algebra

Introductory Example: Computer Models in Aircraft Design

2.1 Matrix Operations

2.2 The Inverse of a Matrix

2.3 Characterizations of Invertible Matrices

2.4 Partitioned Matrices

2.5 Matrix Factorizations

2.6 The Leontief Input—Output Model

2.7 Applications to Computer Graphics

2.8 Subspaces of \mathbb{R}^n

2.9 Dimension and Rank

Supplementary Exercises

Chapter 3 Determinants

Introductory Example: Determinants in Analytic Geometry

3.1 Introduction to Determinants

3.2 Properties of Determinants

3.3 Cramer's Rule, Volume, and Linear Transformations

Supplementary Exercises

Chapter 4 Vector Spaces

Introductory Example: Space Flight and Control Systems

4.1 Vector Spaces and Subspaces

4.2 Null Spaces, Column Spaces, and Linear Transformations

4.3 Linearly Independent Sets; Bases

4.4 Coordinate Systems

4.5 The Dimension of a Vector Space

4.6 Rank

4.7 Change of Basis

4.8 Applications to Difference Equations

4.9 Applications to Markov Chains

Supplementary Exercises

Chapter 5 Eigenvalues and Eigenvectors

Introductory Example: Dynamical Systems and Spotted Owls

5.1 Eigenvectors and Eigenvalues

5.2 The Characteristic Equation

5.3 Diagonalization

5.4 Eigenvectors and Linear Transformations

5.5 Complex Eigenvalues

5.6 Discrete Dynamical Systems

5.7 Applications to Differential Equations

5.8 Iterative Estimates for Eigenvalues

Supplementary Exercises

Chapter 6 Orthogonality and Least Squares

Introductory Example: Readjusting the North American Datum

6.1 Inner Product, Length, and Orthogonality

6.2 Orthogonal Sets

6.3 Orthogonal Projections

6.4 The Gram—Schmidt Process

6.5 Least-Squares Problems

6.6 Applications to Linear Models

6.7 Inner Product Spaces

6.8 Applications of Inner Product Spaces

Supplementary Exercises

Chapter 7 Symmetric Matrices and Quadratic Forms
Introductory Example: Multichannel Image Processing
7.1 Diagonalization of Symmetric Matrices
7.2 Quadratic Forms
7.3 Constrained Optimization
7.4 The Singular Value Decomposition
7.5 Applications to Image Processing and Statistics
Supplementary Exercises
Chapter 8 The Geometry of Vector Spaces
(Online Only)
Chapter 9 Optimization
(Online Only)
Appendixes
A Uniqueness of the Reduced Echelon Form
B Complex Numbers
Glossary
Answers to Odd-Numbered Exercises
Index
• • • • • ([收起](#))

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标签

评论

an expensive book。不过整体还是不错的，彩色的。

[Linear Algebra and Its Applications_ 下载链接1](#)

书评

昨天在图书馆翻了翻"时间序列分析"的书，发现这东西还是很有用的，利用时间作为自变量来预测一个时间序列未来的值，比如，可以预测地震、天气、股票等等，由于它的自变量只有时间，所以感觉很神奇，几乎就是拿一个变量自己来做回归，称之为自回归AR（auto regression），另...

一本非常好的线性代数基础书。
从考研以后，那些不常用到的数学知识便开始逐渐淡忘、褪色。最近对机器学习产生了兴趣，因此又重新开始温习线性代数。
这本书的内容跟中国的教材相比，并没有增加多少，甚至有些东西还有欠缺。但是跟国内图书的不同在于，它详细的讲解了每个公式...

作者在开篇就给了线性代数一个很新奇的定义：“从某种意义上说，线性代数是一门语言，你要像对待外语一样，每天都学。”书中有大量的应用实例，内容结构安排的很好，前几章就引入子空间，向量，线性变换的概念，还介绍了一下线性代数的核心思想和研究内容，而后面几章的内容都...

因为是考研学习LA
所以看了全国被普遍采用的那本紫色的同济LA教材，看着看着我发现那本书其实只是一本
线性代数公式大全，言简意赅到一个境界了，不适合我这样的普通智商的学生参读。
后来选择了这本LA&applications 觉得很不错。每章用一个introductory example开头让人...

看完之后我觉得这才是教材阿。。。
和这本书看起来差不多的还有一本叫《线性代数》，但是这本看起来更容易一些。比起其他满嘴跑概念公式的书籍来说，这本真是初学者的业界良心。。。
书中的内容由浅入深，逐步建立起线代的基本概念，从初学者的角度看，这个根本就不是罗嗦，而...

在几种线性代数入门教材中我想这是最适合中国普通学生的了，抽象能力好的入门可以看linear algebra done right (修改这一部分，抽象能力好的不应该看linear algebra done right这本，这本其实真不好的，抽象能力好的我推荐gelfand的线性代数学 (lecture notes on algebra) 或者...

这看起来不是机翻吗？表述方式一毛一样...看的难受不？我是难受死了，原版不折磨人，感觉是不是机械工业出版社的翻译书水平都不太行...还是我买的书就不太好？继续看原版吧，勿喷我，hhh，我只是表达不满，只是我的看法哟.....

PCA这么重要的东西应该与SVD一样专门写一段，而不是放在“7.5 图像处理 and 统计学中的应用”底下当成普通例子来写。虽然这里PCA写的是真清晰真透彻，秒杀网上无数介绍。另外，SVD讲的太简略了，看完公式也抓不住本质。最好加入几何理解角度，并谈谈与PCA的异同。

这是我发现的第三本台湾交大的使用教材。。和他们的OCourse相符。。。大家如果觉得看书太腻，就请结合一下台湾的OCourse视频来学吧。

网址：http://ocw.nctu.edu.tw/riki_detail.php?pgid=50&cgid=12

（不好意思，教材是有偏差，不過聽課還是幫助蠻大的，課程的順序也基本一樣）

看过这本书里边矩阵的内容还有矩阵在计算机图形学里边的应用部分之后感觉对于计算机图形学豁然开朗。
我没有很深入的看这本书.只看了一些基本运算和概念,作了一些前面的题目.对于我学计算机技术已经够了.

这周的作业有马尔科夫链和状态转移矩阵。最后变换为求解三元和四元的微分方程组的特解。

一类解法是拉普拉斯变换之后分离 s 和 $x(t)$,再使用逆变换。很不幸的是我功力尚浅，变换之后得到了一个满秩的齐次线性方程组。显然求解不下去。

另一种方法是矩阵的特征值和特征向量，相应的...

04年上的大学，05年大二学习的概率论和线性代数，这两门课程学的差，考试也仅过及格线。当是完全不知道线性代数学来是干什么的。10年考研时接触到了统计，冥冥之中感觉统计的威力相当大，当事很想学习一下多元统计，翻开多元统计的书却发现完全看不懂，因为无所不在的线性代数...

A first course in linear algebra is dramatically different from most mathematics courses that precede it. The focus shifts from learning computational procedures to digesting and mastering basic concepts that underlie the computations. To survive, you may need...

最近想进修一下统计，遇到第一个难关就是线性代数，好多东西都忘得差不多了，只记

得某年某月曾算过特征值和特征向量……

依稀记得当年考研时候用的就是Lay老人家这本书的中文版，但想到自己已经是研究僧了，应该看看原版书了，于是决定厚颜无耻地去爱问上偷书。下...

在学习的同时，知道很多应用实例，记忆非常深刻。

学完这本书，对线性代数应用可以到一定的广度的了解

但是学完国内一般的线性代数教材，觉得还是非常虚幻。强烈建议国内大学实用。

看过了介绍后，感觉比较适合我。

本书是一本优秀的现代教材，给出最新的线性代数基本介绍和一些有趣应用。

001) 143页，图2-23 (c)，说是【旋转-30度】，在图像却旋转了【90度】。——国际惯例，逆时针旋转为正方向，是这样的吧？

002) 190页8行：“…，它们在【-比在】航天飞机中用到的数字系统中有用。”——这里疑似多了两个字符。003) 227页定理11的证明第2行：“若S生成H，则【…

认识一本好书就像遇见对的人，这本书就给我这种感觉，相见恨晚！

先说那些小装饰，章前都有相关知识对应的生活应用实例+配图，虽然内容很少，但也很好地拉近了线代与生活的距离；一些注释会有一些参考文献的名字，偶尔去网上翻一下可以深入了解，甚至能挖到一些厉害的书，很开...

原书可能是好书，但是中文版翻译真是太烂了，奉劝诸位能看英文版的尽量看英文的。

ps:第二页的“两个线性方程组称为等价的.若它们有相同的解集.”这是高中生的翻译水平么？简直是侮辱高中生。我真的很怀疑这本书的译者怎么有胆量把自己的名字印在书上的，不嫌丢人么？我真的很...

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