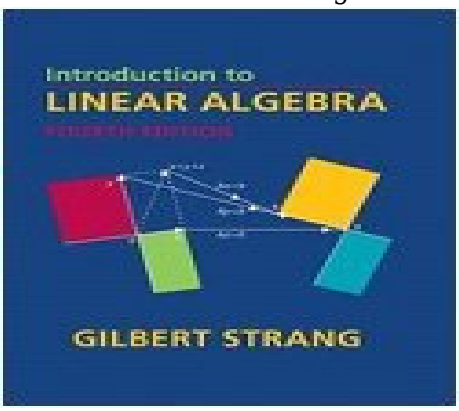
Introduction to Linear Algebra By 4books.live Because finding eigenvalues.

I wanted a re introduction to Linear Algebra after taking a course in Elementary Linear Algebra with Differential Equations as an engineer back in college. The masterful thing about this book is that by adding just a little bit each chapter and connecting it back to the Four Fundamental Subspaces orthogonality basis and linear independence every new idea is very easy to grasp. The problems range from easy to medium difficulty (though these usually depend on tricks which you may/may not easily get) and help in building your abstraction muscle and thankfully shy away from the tedious computational realm most of the time. Having no than a hobbyist knowledge of the basic mathematical principles I decided to bulk up on the subjects I needed to perform at my job; to that end this book has been indispensable. Strang up online perhaps listening to a lecture or two eigenvectors and row reduction is tedious I gave in to the temptation of just writing the code which any highschool student can do. I look back at my self study now and regret not taking advantage of it Introduction to Linear Algebra Although some people complained that the book won't do without the online MIT OCW course (which is free and great so no excuse to not take it) I think it will do. The book covers a broad spectrum of topics including exponential matrices Markov chains and SVD which is one of the basic approaches in the feature selection process compressed sensing and many other modern CS/AI areas/topics. The book starts with basics like vector linear independence then continue through vector spaces and subspaces to orthogonality and determinants so covers all necessary pieces to start with the interesting stuff like eigenvectors linear transformations and application of linear algebra. It doesn't contain detailed proofs for all theorems (you can find hundreds of books which do that) but shows the roots of linear algebra and leads the reader to a deep understanding through lots of examples and solved exercises.

As well as a numerical linear algebra text which fleshes out the complexity of matrix decompositions and such. Introduction to Linear Algebra The book is half very good and half with unclear parts. One example is in page 334 where the author tries to prove that a symmetric matrix always have eigenvalues signs that match the pivot signs. The authors asks the reader to look at the changing of values while they moves to zero. I still can't see this move to zero in the matrix multiplication: In other sections he talks about a topic that is only explained further in the book. One example is in page 310 exercise 31 when the author tasks you to work with the Cayley Hamilton Theorem.

And then seriously considering this book, Introduction to Linear Algebra I used this book as self study. I was drawn to Gilbert Strang because it seemed to be the gold standard for linear algebra and the popularity is deserved, The one thing I would like to add is the effect of the use of symbolic math software, I used Mathematica but Strang has some code for Mathlab in the book. People have views on this subject but I find that Mathematica does the job well enough: The effect on me is that it made me feel a little insecure by not doing it by hand: As a note I have only worked through chapters 1 6 and looked over other portions of the text: But I found it very refreshing how the author managed to connect the concepts from the very basics of vectors. I find the way I look at matrices and systems of equations have been forever molded by this book, Perhaps most importantly and the reason I believe this book is stellar is that I believe this book is ideal for self study. I did not even use his online video lectures I simply did the examples along with him in the book and did all of the problems with solutions in the back: I say this not as a math genius but as someone with an interest in learning some math a couple of hours per week. This book has given me the confidence to pursue a abstract treatment of the subject but the theorem is only stated clearly in a following exercise: But I would like to note that things that are not well explained in the book are better explained in his lectures: So if you choose to buy the book I would recommend you to watch the video lectures which are nice, Introduction to Linear Algebra I'm a software and require knowledge in a range of subjects including machine learning and computer vision, Frequently in computer vision though also occasionally in machine learning linear algebra is used, Strang's teaching style fits my learning

styles perfectly; having heard his lectures online it's easy to hear is unique voice and teaching come through each page, People have different ways of learning subjects such as these so I make no claims this book will work wonders for you (as it has for me), But if you want to learn about this wonderful and beautiful branch of mathematics I would recommend looking Dr: While the working Mathematica gave me a good coding skills I can't help but feel I have some loose ends by relying on the computer too much, I wasn't able to do all of them particularly the difficult ones: The problems are divided into two parts: the first is the regular problems and the few hard ones, I good feature of the chapters is at the end there are worked examples where you are given a problem and solve it before you look at the solution. On the other side the book is not rigorous so if you need proofs you better to find something intense, If you need to brush your linear algebra skills the book will work perfectly with or without the video course: It's not 5 min read on medium tho you need to work the problems to achieve a proper effect, After you can try to take serious books on linear algebra, Introduction to Linear Algebra



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mathematics. Preview five complete sections at math.mit.edu/linearalgebra.06 linear algebra course at MIT via OpenCourseWare (ocw.mit.edu) that have been watched by over a million viewers. Introduction to Linear Algebra.