

神经网络与机器学习

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著者:(加)海金

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《神经网络与机器学习(英文版第3版)》的可读性非常强，作者举重若轻地对神经网络的基本模型和主要学习理论进行了深入探讨和分析，通过大量的试验报告、例题和习题来帮助读者更好地学习神经网络。神经网络是计算智能和机器学习的重要分支，在诸多领域都取得了很大的成功。在众多神经网络著作中，影响最为广泛的是Simon Haykin的《神经网络原理》(第4版更名为《神经网络与机器学习》)。在《神经网络与机器学习(英文版第3版)》中，作者结合近年来神经网络和机器学习的最新进展，从理论和实际应用出发，全面、系统地介绍了神经网络的基本模型、方法和技术，并将神经网络和机器学习有机地结合在一起。《神经网络与机器学习(英文版第3版)》不但注重对数学分析方法和理论的探讨，而且也非常关注神经网络在模式识别、信号处理以及控制系统等实际工程问题中的应用。

本版在前一版的基础上进行了广泛修订，提供了神经网络和机器学习这两个越来越重要的学科的最新分析。

作者介绍:

Simon Haykin，于1953年获得英国伯明翰大学博士学位，目前为加拿大McMaster大学电子与计算机工程系教授、通信研究实验室主任。他是国际电子电气工程界的著名学者，曾获得IEEE McNaughton金奖。他是加拿大皇家学会院士、IEEE会士，在神经网络、通信、自适应滤波器等领域成果颇丰，著有多部标准教材。

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标签

神经网络

机器学习

人工智能

模式识别

AI

数据挖掘

计算机

智能

评论

读读历史也挺有意思的

发现得补点矩阵论了--中文版真的不了吧

全面，系统，重要。

基础的东西讲的很深，但是没有最新的东西

神经网络综合入门

知识有点老了，不推荐现在读

CV入门。

这本书非常著名，我粗略看了一下，发现对工科还真是不够友好。。。大量的数学背景知识都是计算机专业的，工科完全跳过不学的。很多数理地方读不太懂，实例又太少，而且翻译非常辣鸡，浓浓的谷歌机翻风，你看了就知道我在说什么了。还是挺吃力的，准备放一放，等再学些更基础的理论之后再回过头来看。

总体说来还行把

非常难读的一本书，质量还行

给四星吧，数学功底还是要有的，慢慢读能读进去，原著比较有逻辑性，翻译emmm不多说，总之也帮我省了不少事

作者不仅讲概念讲定义讲数学，还会用浅显易懂的语言讲述概念背后的内涵，真的很难得！

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书评

看着看着，我想起了那一句老话：一人翻为佳，二人翻为庸，三人翻为渣，若是三人等，则弗如渣渣——
这本书的译者不知道是不大熟悉这方面，还是机翻习惯了？
这本书本身大多是数学理论的堆砌，没有比较好的基础很难看懂，加上译者含混过关，大量的机翻体验与...

这本书还算有点名气，有不少的AI书籍的参考文献都提及了它。书名虽然是foundation，但却是偏重于数学的。对于ANN的几乎所有原理都没有给出可以在直觉上理解的原因，比如，为什么对于w的初始化要随机且尽可能小；冲向量的直观解释是什么；对于分布不均匀的结果类别应该如何对w正...

我的研究生课程Neural Networks就是用的本书第二版。因为教授说了，他不喜欢更新的第三版。感觉本书基本涵盖了神经网络的许多基础部分和重要方面。像Back Propagation, Radial-Basis Function, Self-Organizing Maps, 以及single neuron中的Hebbian Learning, Competitive L...

神经网络不仅是现在的思维模式，计算机的将来计算模式，还是简单的细胞的运算模式。他们没有真正的思考，而是计算。计算是机器也能够做到的，因此不管人是否理解或者机器是否知道，都可以从容应对。而不知道的事物如此之多，因此不必担心他们会自动的进入圈套。他们不仅是可...

是很全面的机器学习理论书籍，不过大多数读者是看不明白的，翻译也很一般。 p92
三个标准化步骤的结果，消除均值、去相关性以及协方差均衡
是很全面的机器学习理论书籍。 p94 对于神经元，训练率应该与突触数量成反比。 p92
三个标准化步骤的结果，消除均值、去相关性以及协方...

原书：Neural Networks and Learning Machines 土豪，注意，这是 Learning Machines,
而不是 Machine Learning 神经网络与学习机会更好。

垃圾翻译。 P370 马尔克夫链的遍历性 the long-term proportion of time spent by the
chain .. The proportion of time spent in state i after k returns, denoted by π_i . The return
times T_i form a sequence of statistically independent and identically distributed ran...

这次是第一次通读了整本书，里面的很多数学公式推导、部分原理没看明白，我想大部
分第一次读的人应该也和我差不多吧。
如果作为学习神经网络的入门书，我想这本可能不太适合，因为它太多太细，初学者很
容易陷入细节受到挫败感。 但并不是说这本书不好，相反，这本书绝对是经典...

总体看来，原著的结构性是比较强的，而且原著作者是经过信号处理转过来的，以LMS
作为BP
的引导这块感觉挺有新意，同时不仅从数学分析方法，更重要的是从贝叶斯估计入手，
更容易理解机器学习是一种统计推断，而不是看起来完美的微积分推导。但是，翻译的
人，对， 就是那个姓申的...

模仿生物的神经系统，人类开始设计制造人工神经网络。人工神经网络具有很多类似人
脑的功能，其中就包括学习功能，也就是机器学习。
小脑在运动的控制和协调中起到了非常重要的作用，通常进行得非常平稳并且几乎毫不
费力。在文献中，已经提到小脑扮演着动态估计的控制者或者神经...

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