

<<控制系统导论>>

图书基本信息

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## <<控制系统导论>>

### 内容概要

本书初版于1974年，再版于1984年，自80年代以来，由于计算机辅助设计软件的应用已成为控制系统分析与设计研究的重要手段。

因此，作者对第二版内容作了彻底修改、扩充和更新。

在强调计算机应用的同时，第三版仍保留了许多经典的解析和图形技术。

在最初的几章里，强调了控制系统的概念，仔细分析了有代表性的传函和状态方程。

在反馈控制的讨论中，引入鲁棒这一概念来研究参数的变化对系统行为的影响。

新增添的两章阐述了控制策略和自适应控制。

另外，新版还对控制系统设计、离散控制和非线性控制系统等内容做了扩充。

目次：导论；物理系统建模；控制系统模型；时钟反馈的经典方法；时钟反馈的状态方程；性能标准；稳定性评估和性能评估；控制策略和设备比较；系统补偿；离散时钟控制系统；非线性控制系统；系统和随机输入；自适应控制系统。

读者对象：机械和自动控制专业师生和工程技术人员。

#### 作者简介

Dr D. K. Anand is both a Professor and Chairman of the Department of Mechanical Engineering at the University of Maryland, College Park, Maryland, U.S.A. He is a registered Professional Engineer in Maryland and has consulted widely in Systems Analysis for the U.S. Government and Industry. He has served as Senior Staff at the Applied Physics Laboratory of the John Hopkins University and Director of Mechanical Systems at the National Science Foundation. Dr Anand has published over one hundred and fifty papers in technical journals and conference Proceedings and has published two othe books on Introductory Engineering. As well he has a patent on Heat Pipe Control. He is a member of Tau Beta Pi, Pi Tau Sigma, Sigma Xi, and is a Fellow of ASME.

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