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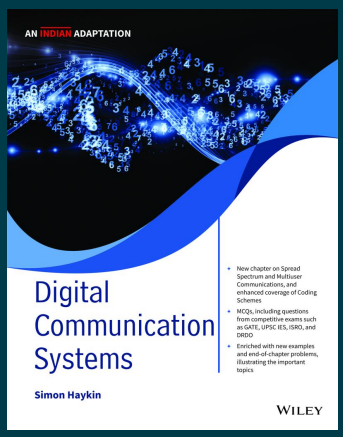

Digital Communication Systems, An Indian Adaptation

By Simon Haykin
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Description

Digital Communication Systems is a comprehensive textbook, focusing on the core principles of digital communications and relating theory to practice. Starting with the background of Fourier analysis, probability theory, and stochastic processes to analyze random signals, the book covers sampling theory, pulse-amplitude modulation, pulse-code modulation, delta modulation, matched filter, intersymbol interference, and adaptive equalization. It then discusses passband digital modulation techniques such as ASK, PSK, FSK, and QAM, followed by multiple access techniques such as FDMA, TDMA, and CDMA. Lastly, it discourses on information theory in detail and various coding schemes to control the occurrences of errors in communication systems.

About the Author

Simon Haykin

Simon Haykin is a University Professor at McMaster University, Hamilton, Ontario, Canada. His research interests include nonlinear dynamics, neural networks and adaptive filters and their applications in radar and communications systems. Dr. Haykin is the editor for a series of books on "Adaptive and Learning Systems for Signal Processing, Communications and Control" published by John Wiley & Sons

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