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Understanding Markov Chains

Examples and Applications - Second Edition

Python and R codes

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Chapter 1 - Probability Background

Chapter 2 - Gambling Problems

Chapter 3 - Random Walks

Chapter 4 - Discrete-Time Markov Chains

Download the [R code](#) or the [IPython notebook](#) for Figure 4.3 that can be run [here](#).

Download the [R code](#) or the [IPython notebook](#) for Figure 4.5 that can be run [here](#).

Chapter 5 - First Step Analysis

Chapter 6 - Classification of States

Chapter 7 - Long-Run Behavior of Markov Chains

Chapter 8 - Branching Processes

Download the [R code](#) or the [IPython notebook](#) for Figure 8.8 that can be run [here](#).

Chapter 9 - Continuous-Time Markov Chains

Download the [R code](#) or the [IPython notebook](#) for Figure 9.5 that can be run [here](#).

Download the [R code](#) or the [IPython notebook](#) for Figure 9.8 that can be run [here](#).

Chapter 10 - Discrete-Time Martingales

Chapter 11 - Spatial Poisson Processes

Chapter 12 - Reliability and Renewal Processes