# The ARIMA and VARIMA Time Series: Their Modelings, Analyses and Applications

**Ky M. Vu**

This book discusses various topics of the discrete time series. Divided into nine chapters, the book covers fundamental topics like ARIMA time series, harmonic time series, time and frequency statistics, forecast and prediction. One whole chapter is devoted to the discussion of two major applications: digital controller and digital filter designs.

**Chapter Titles:**

1. Introduction
2. Probability and Statistics
3. Scalar ARIMA Time Series
4. Time Statistics of an ARIMA Time Series
5. Frequency Statistics of an ARIMA Time Series
6. Vector ARIMA Time Series
7. Time Series Modeling or Identification
8. Forecast or Prediction
9. Applications

The book was written for time series statisticians, digital signal processing engineers, stochastic control engineers as well as graduate students in these fields. It can be used as a self-study material or a reference textbook. There are numerous examples throughout the book, and each chapter contains exercises at the end.

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