

# Toward Real-Time Pattern Recognition Systems

# 4

Part 4 aims to cover the family of needs associated with the production of practical visual pattern recognition systems. Not least among these needs are the requirements of error minimization, real-time operation, and system integration. Hence, this part of the book must cover a disparate variety of topics ranging from analysis of 2-D and 3-D scenes, and the methods of statistical pattern recognition, to applications such as automated visual inspection and vehicle guidance, and consideration of the lighting and hardware systems required to acquire the images and perform the necessary processing in real time. In fact, the chosen topics are so variegated, and interact with each other at such a variety of different levels, that there can be no ideal order of presentation. Nevertheless, the intelligent reader should not have too much difficulty in finding relevant information.