

## **Part III**

# **Applications and case studies**

Given the generality of the statistical and variational algorithmic approaches presented in the preceding two parts of this book, we can now proceed to the applications. We will see that their field of applicability is vast, ranging from environmental to medical, engineering, and even financial case studies. In each chapter, we provide easily accessible examples and case studies that refer extensively to Parts I and II. We include, in each chapter, pointers and references to numerous realistic and complex cases.