# Chapter 6
# Concluding Remarks and Perspectives in Computer Vision

The previous chapters covered some topics relating to computer vision: how global and local features are generated, how to fast index them and how to implement content-based retrieval algorithms in relational database management systems. Chapter 1 is an introduction to the book subject. Chapter 2 presents several methods for image feature detection and description, starting from image interest points, through edge and blob detection, image segmentation till global features. Chapter 3 concerns feature comparison and indexing for efficient image retrieval and classification. Chapter 4 presents novel methods for feature description and Chap. 5 consists of a set of relational database implementation. Computer vision is not a mature discipline and is continually developing and evolving. Therefore, it is not possible to cover all the directions and solve all challenges within the scope of one book. Currently, it is hard to rival human vision in a general sense as it is our most powerful sense. Deep learning and hardware rapid development gradually change this situation. In 2015 neural networks defeated humans in the ImageNet Large Scale Visual Recognition Challenge. Computer vision starts to shift from relying on hand-made features to learned features. This can constitute a direction in the future research, namely, using trained features in the methods described in Chaps. 3 and 5, would possibly improve the accuracy. Moreover, the robustness in terms of immunity to noise, occlusions, distortion, shadows etc. can also be improved. Computer vision benefits heavily from the development of computer hardware as many algorithms are NP-complete. Since Moore's law (and other types of the hardware development) will most likely still be valid, vision system will be more and more sophisticated.