

Preface

Visual attributes are generally defined as mid-level semantic visual concepts or properties that are shared across categories, e.g., furry, striped, metallic, young. They have recently gained significant popularity in computer vision, finding applications in zero-shot classification (where a machine can recognize a concept even without having seen it before), image ranking and retrieval, fine-grained categorization, human–machine interaction, and many others.

This book provides an overview of and summarizes recent advances in machine learning and computer vision related to visual attributes, while exploring the intersection with other disciplines such as computational linguistics and human–machine interaction. It contains a collection of chapters written by world-renowned scientists, covering theoretical aspects of visual attribute learning as well as practical computer vision applications.

We would like to express our sincere gratitude to all chapter contributors for their dedication and high-quality work, as well as to Simon Rees and Wayne Wheeler from Springer for their support and help throughout the book’s preparation.

Yorktown Heights, NY, USA
Vienna, Austria
Atlanta, GA, USA
September 2016

Rogério Schmidt Feris
Christoph Lampert
Devi Parikh

Visual Attributes

Feris, R.S.; Lampert, C.; Parikh, D. (Eds.)

2017, VIII, 364 p. 142 illus., 137 illus. in color.,

Hardcover

ISBN: 978-3-319-50075-1