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Soggetti	Machine learning Optical data processing Signal processing Image processing Speech processing systems Artificial intelligence Application software Machine Learning Computer Imaging, Vision, Pattern Recognition and Graphics Signal, Image and Speech Processing Artificial Intelligence Computer Applications
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Part I: Introduction -- Chapter 1: Introduction to Domain Adaptation -- Chapter 2: Shallow Domain Adaptation -- Part II: Domain Alignment in the Feature Space -- Chapter 3: d-SNE: Domain Adaptation using Stochastic Neighborhood Embedding -- Chapter 4: Deep Hashing Network for Unsupervised Domain Adaptation -- Chapter 5: Re-weighted Adversarial Adaptation Network for Unsupervised Domain Adaptation -- Part III: Domain Alignment in the Image Space -- Chapter 6: Unsupervised Domain Adaptation with Duplex Generative Adversarial Network -- Chapter 7: Domain Adaptation via Image to Image Translation -- Chapter 8: Domain

Adaptation via Image Style Transfer -- Part IV: Future Directions in Domain Adaptation -- Chapter 9: Towards Scalable Image Classifier Learning with Noisy Labels via Domain Adaptation -- Chapter 10: Adversarial Learning Approach for Open Set Domain Adaptation -- Chapter 11: Universal Domain Adaptation -- Chapter 12: Multi-source Domain Adaptation by Deep Cocktail Networks -- Chapter 13: Zero-Shot Task Transfer.

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## Sommario/riassunto

This book provides a survey of deep learning approaches to domain adaptation in computer vision. It gives the reader an overview of the state-of-the-art research in deep learning based domain adaptation. This book also discusses the various approaches to deep learning based domain adaptation in recent years. It outlines the importance of domain adaptation for the advancement of computer vision, consolidates the research in the area and provides the reader with promising directions for future research in domain adaptation. Divided into four parts, the first part of this book begins with an introduction to domain adaptation, which outlines the problem statement, the role of domain adaptation and the motivation for research in this area. It includes a chapter outlining pre-deep learning era domain adaptation techniques. The second part of this book highlights feature alignment based approaches to domain adaptation. The third part of this book outlines image alignment procedures for domain adaptation. The final section of this book presents novel directions for research in domain adaptation. This book targets researchers working in artificial intelligence, machine learning, deep learning and computer vision. Industry professionals and entrepreneurs seeking to adopt deep learning into their applications will also be interested in this book.

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