

Index

A

Analogous attributes, 67
Attribute binary search trees, 99
Attribute editor, 174
Attribute shades of meaning, 107
Attribute vocabulary discovery, 247
Autoencoders, 345

- bimodal autoencoders, 349
- denoising autoencoders, 346
- stacked autoencoders, 347
- stacked bimodal autoencoders, 349

B

Beauty e-Experts, 224
Bubbles game, 262

C

Category-sensitive attributes, 69
Class imbalance, 183
Clothing attributes, 218
Clothing detection, 239
Composite activity recognition, 311
Convolutional Neural Networks (CNNs), 26,
42, 165, 181, 236, 253, 324, 335
Cross-domain clothing retrieval, 234
Crowdsourcing, 274

D

DAP model, 23, 42, 306
Datasets

- aPascal/aYahoo, 25, 60
- AwA, 25, 42, 60, 308
- CelebA, 189, 196
- CUB-200-2011, 60

ImageNet, 73, 308
LFW-10, 143, 165
MPII Cooking, 314
Multi-Attribute Facial Landmark, 206
Outdoor Scene Recognition, 95, 133
PubFig, 95, 133
Shoes, 95, 165
SUN attributes, 25, 73, 269
UT Zappos50K, 131, 143, 165
Visa, 337
Distributional models, 333
Domain adaptation, 20
Dual Attribute-aware Ranking Network, 236
Dynamic programming, 160

E

ESZSL, 23

F

Face alignment, 202
Face detection, 196
Face localization, 192
Faceness, 196
Facial attribute classification, 181
Fashion analytics, 216
Feature competition, 54
Fine-grained attributes, 120, 235

G

Gaussian process, 41
Gibbs distribution, 228
Grounding, 318, 331

I

Image captioning, 313
 Image retrieval, 89, 119, 234

J

Just noticeable differences, 138

L

Label propagation, 309
 Large Margin Local Embedding, 183
 Latent SVM, 220
 Learning using Privileged Information (LUPI), 32, 35
 LNet+ANet, 192
 Local learning, 127
 Local smoothness, 160
 Loss function, 18
 cross-entropy loss, 238
 triple-header hinge loss, 185
 triplet loss, 187, 238

M

Magic closet, 218
 Margin transfer, 38
 nonlinear margin transfer, 39
 Model selection, 42
 Multi-task learning, 51
 Multimodal deep learning, 345

N

Non-semantic PnAs, 250

P

Parts and attributes, 247
 Personalization, 103
 Propagated Semantic Transfer, 309

R

Recommendation systems, 217
 clothing recommendation, 218
 makeup recommendation, 224
 Regularization, 18, 59
 Relative attributes, 93, 120, 155
 Relevance feedback, 91
 Risk bounds, 20

S

Scene attributes, 269
 Scene classification, 292
 Selective sharing, 51
 Self-paced learning, 161
 Semantic language-based PNAs, 253
 Semantic language-free PNAs, 259
 Semantic relatedness, 306
 Structured sparsity, 57
 Super-graphs model, 227
 SVM+, 35
 nonlinear SVM+, 37
 Synthetic data, 23

T

Tasks-Constrained Deep Convolutional Network, 203
 Text mining, 256
 Textual attributes, 343

V

Visual chains, 159
 Visual question answering, 323

Z

Zero-shot learning, 11, 293, 305