Appendix D

List of kernels

D.1 Kernel definitions and computations

Reference	Title	Page
Definition 9.1	Polynomial kernel	292
Computation 9.6	All-subsets kernel	295
Computation 9.8	Gaussian kernel	296
Computation 9.12	ANOVA kernel	299
Computation 9.18	Alternative recursion for ANOVA kernel	302
Computation 9.24	General graph kernels	307
Definition 9.33	Exponential diffusion kernel	313
Definition 9.34	von Neumann diffusion kernel	313
Computation 9.35	Evaluating diffusion kernels	314
Computation 9.46	Evaluating randomised kernels	321
Definition 9.37	Intersection kernel	315
Definition 9.38	Union-complement kernel	316
Remark 9.40	Agreement kernel	316
Definition 9.41	Derived subsets kernel	317
Section 9.6	Kernels on real numbers	318
Remark 9.45	Spline kernels	320
Definition 10.5	Vector space kernel	331
Computation 10.8	Latent semantic kernels	338
Definition 11.7	The p -spectrum kernel	348
Computation 11.10	The p -spectrum recursion	349
Remark 11.13	Blended spectrum kernel	350
Computation 11.17	All-subsequences kernel	353
Computation 11.24	Fixed length subsequences kernel	358
Computation 11.33	Naive recursion for gap-weighted	364
	subsequences kernel	
Computation 11.36	Gap-weighted subsequences kernel	366
Computation 11.45	Trie-based string kernels	373