Machine Learning

Allen Sun

Contents

1	Mad	chine learning	2
2		pervised learning	
	2.1	Linear regression	
	2.2	Logistic regression	
	2.3	Support vector machine (SVM)	5
	2.3.1 2.3.2		
	2.4	Neural Network	6
3	Uns	supervised learning	9
	3.1	K-means	9
	3.2	Principal component analysis (PCA)	10
	3.3	Anomaly detection	
	3.3.1		
	3.3.2		
	3.3.3	3 Collaborative filtering	14
4	Tips	S	15
	4.1	Diagnostics	15
	4.2	Model Selection and Train/Validation/Test Sets	16
	4.3	Gaussian (Normal) distribution	16
	4.4	F ₁ -score	17