C	Contents		14 Exponential Family	16	21.5 Spectral Analysis 28
1	Distribution Overview	3	15 Bayesian Inference	16	22 Math 29
	1.1 Discrete Distributions	3	15.1 Credible Intervals		22.1 Gamma Function
	1.2 Continuous Distributions	5	15.2 Function of parameters		22.2 Beta Function
	D 1 1 111	0	15.3 Priors		22.3 Series
2	Probability Theory	8	15.3.1 Conjugate Priors		22.4 Combinatorics
3	Random Variables	8	15.4 Bayesian Testing	18	
0	3.1 Transformations	9	16 Sampling Methods	18	
			16.1 Inverse Transform Sampling		
4	Expectation	9	16.2 The Bootstrap		
			16.2.1 Bootstrap Confidence Intervals .	18	
5	Variance	9	16.3 Rejection Sampling	19	
c	Inaqualitias	10	16.4 Importance Sampling	19	
O	Inequalities	10	15 D ' ' TI	10	
7	Distribution Relationships	10	17 Decision Theory	19	
·	Discussion received the property of the proper		17.1 Risk		
8	Probability and Moment Generating		17.2 Admissionity		
	Functions	11	17.4 Minimax Rules	20	
_	35 34 4 5 54 4 5		Titl Millian Pales	-0	
9	Multivariate Distributions	11	18 Linear Regression	<b>20</b>	
	9.1 Standard Bivariate Normal		18.1 Simple Linear Regression		
	9.2 Bivariate Normal		18.2 Prediction		
	9.3 Multivariate Normal	11	18.3 Multiple Regression		
10	) Convergence	11	18.4 Model Selection	22	
	10.1 Law of Large Numbers (LLN)		19 Non-parametric Function Estimation	22	
	10.2 Central Limit Theorem (CLT)		19.1 Density Estimation	22	
	,		19.1.1 Histograms	23	
11	Statistical Inference	12	19.1.2 Kernel Density Estimator (KDE)		
	11.1 Point Estimation		19.2 Non-parametric Regression	23	
	11.2 Normal-Based Confidence Interval		19.3 Smoothing Using Orthogonal Functions	24	
	11.3 Empirical distribution				
	11.4 Statistical Functionals	13	20 Stochastic Processes	24	
19	2 Parametric Inference	13	20.1 Markov Chains		
12	12.1 Method of Moments		20.2 Poisson Processes	25	
	12.2 Maximum Likelihood		21 Time Series	<b>25</b>	
	12.2.1 Delta Method		21.1 Stationary Time Series		This cookbook integrates various topics in probability theory
	12.3 Multiparameter Models		21.2 Estimation of Correlation		and statistics, based on literature [1, 6, 3] and in-class material
	12.3.1 Multiparameter delta method		21.3 Non-Stationary Time Series	26	from courses of the statistics department at the University of
	12.4 Parametric Bootstrap		21.3.1 Detrending	27	California in Berkeley but also influenced by others [4, 5]. If you
	-		21.4 ARIMA models		find errors or have suggestions for improvements, please get in
13	B Hypothesis Testing	15	21.4.1 Causality and Invertibility	28	touch at http://statistics.zone/.