

Preface	4
1. Linear Algebra	5
1.1 Operations	7
1.2 Norms	8
2. Probability	10
2.1 Random Variables and Probability Distribution	11
2.3 Expectation, Variance and Covariance	13
3. Calculus and Optimization	14
3.1 Derivative	15
3.2 Gradient Descent	15
3.3 The Jacobian & The Hessian	16