Regression Analysis Notes

Release 0.0.1

Xinpei Shen

Oct 26, 2024

CONTENTS

1 Matrix Preparation **1**
1.1 Idempotent Matrix 1
1.2 Trace and Eigenvalues 1

2 Linear Regression **3**
2.1 Least Squares Estimator 3
2.2 Unbiased Estimator 3

CHAPTER

ONE

MATRIX PREPARATION

1.1 Idempotent Matrix

1.2 Trace and Eigenvalues

CHAPTER

TWO

LINEAR REGRESSION

2.1 Least Squares Estimator

2.2 Unbiased Estimator