Introduction to Regression with Python

Your Name

1 Course Description

In this course, you will learn the basics of regression analysis and how to apply it in Python. We will cover simple linear regression, multiple linear regression, and polynomial regression. We will also discuss the importance of regression analysis in real-world applications and how it can be used to make predictions and inform decision-making.

2 Course Outline

1. Introduction to Regression Analysis

   - Definition of regression analysis
   - Applications of regression analysis
   - Types of regression analysis

2. Simple Linear Regression

   - Definition of simple linear regression
   - Example of simple linear regression
   - Assumptions of simple linear regression
   - Implementing simple linear regression in Python

3. Multiple Linear Regression

   - Definition of multiple linear regression
   - Example of multiple linear regression

- Assumptions of multiple linear regression
- Implementing multiple linear regression in Python

4. Polynomial Regression

- Definition of polynomial regression
- Example of polynomial regression
- Implementing polynomial regression in Python

5. Conclusion

- Recap of the course
- Next steps and resources for further learning