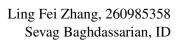# Regression and ANOVA

Final Project
MATH 533

Authors: *Ling Fei Zhang and Sevag Baghdassarian*

Instructor: *Mehdi Dagdoug*
Department: Mathematics
Date: November 24, 2023

Contents

1 Introduction

(a) Residuals

Min	1Q	Median	3Q	Max
-949152.5	-137658.7	-22279.9	100540.6	1354243.5

(b) Coefficients

Coef	Estimate	Std. error	t value	p value
x0	226.6	2.8	81.3	1.1102230246251565e-16

Residual standard error: 211022.60 on 21413 degrees of freedom
R-squared: 0.46, Adjusted R-squared: 0.46
F-statistic: 18422.07 on 1 and 21413 DF, p-value: 1.1102230246251565e-16

(c) Other Metrics

Sigma naive	Sigma cor	MSE	MAE	RMSE
44526380006.3	44528459317.9	44526380006.3	154679.9	211012.7

Table 1: Univariate Linear Regression Summary