

# Data Science Test Document

Soheil

January 10, 2026

## 1 Introduction

This is a sample document to verify that the L<sup>A</sup>T<sub>E</sub>X compiler is working correctly on your machine.

## 2 Math Example

As a test for mathematical rendering, here is the Mean Squared Error (MSE) cost function often used in regression:

$$J(\theta) = \frac{1}{2m} \sum_{i=1}^m (h_\theta(x^{(i)}) - y^{(i)})^2 \quad (1)$$

## 3 Conclusion

If you are reading this in a PDF, the installation was successful!