Compiler Provenance

Homework 1 - Machine Learning Engineering in Computer Science "La Sapienza" University of Rome

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1 Introduction

The purpose of this homework is to apply machine learning algorithms to solve the compiler provenance problem. It consists of identifying the **compiler** and the **optimization** who produced a given binary code of a function. So we have two types of classification problems:

- ullet Binary classification: optimization can be $HIGH\ (H)$ or $LOW\ (L)$
- Multi-class classification: compiler can be gcc, icc or clang
- 2 Dataset
- 3 Find best classifier
- 4 Predictions
- 5 Conclusions