Evaluating MLP

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*Abstract*—

# Introduction

# Background

## The Dataset

The dataset comes from a 1998 paper in Cement and Concrete Research. It is made up of 1000 datapoints with 8 measurements for each datapoint: Cement(kg/m3), Fly ash (kg/m3), Blast furnace slag(kg/m3), water(kg/m3), Superplasticizer(kg/m3), Coarse aggregate(kg/m3), Fine aggregate(kg/m3), Age of testing(days). The components will need to be normalised as some components have a mean of 3.5kg/m3 (Superplasticizer) and others a mean of 943.5kg/m3 (Coarse Aggregate).

The original paper mentions that a portion of the dataset was removed from the original testing due to large aggregates ( >20mm) and other reasons, this cut the original dataset down to ~700 samples, the provided dataset does not distinguish between the original dataset and the simplified dataset. The evaluation will have to continue with a note that some of the data could be non-standard. Additionally, the Superplasticizer is not the same material for each sample and could have more of an impact than suggested by the mass.

# Methodology

# results

# conclusions