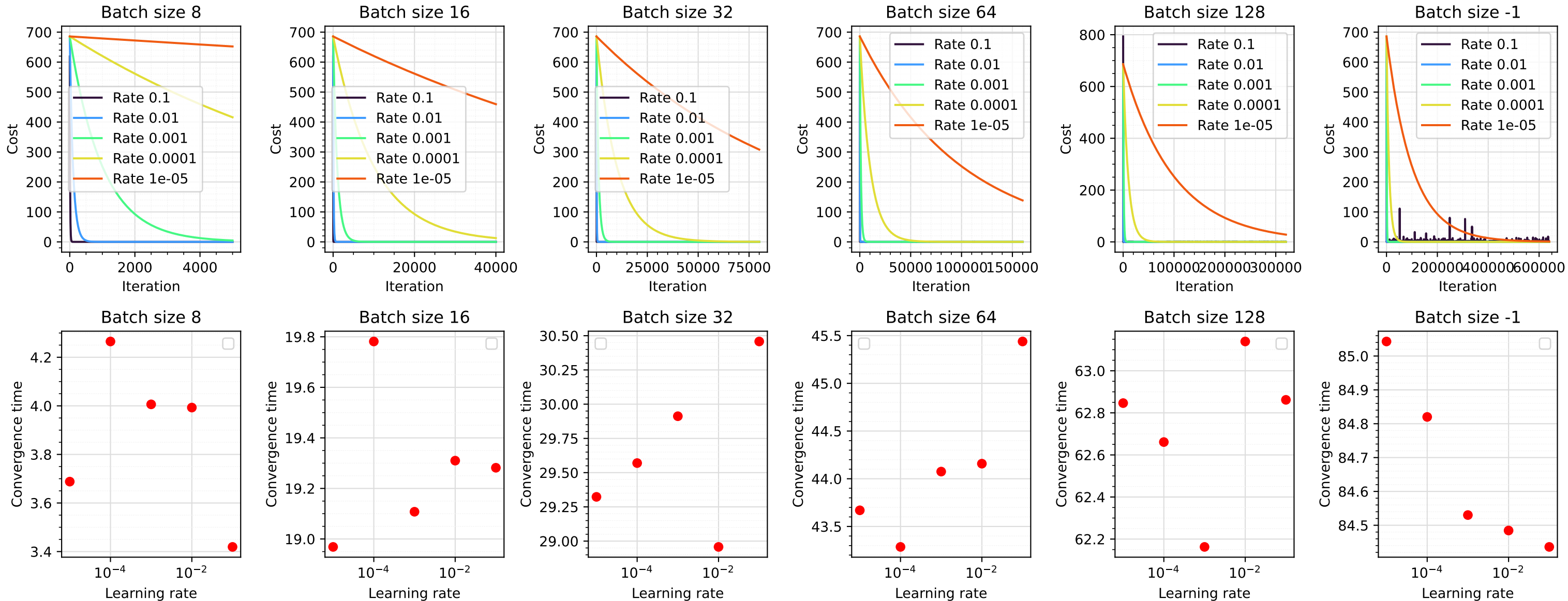
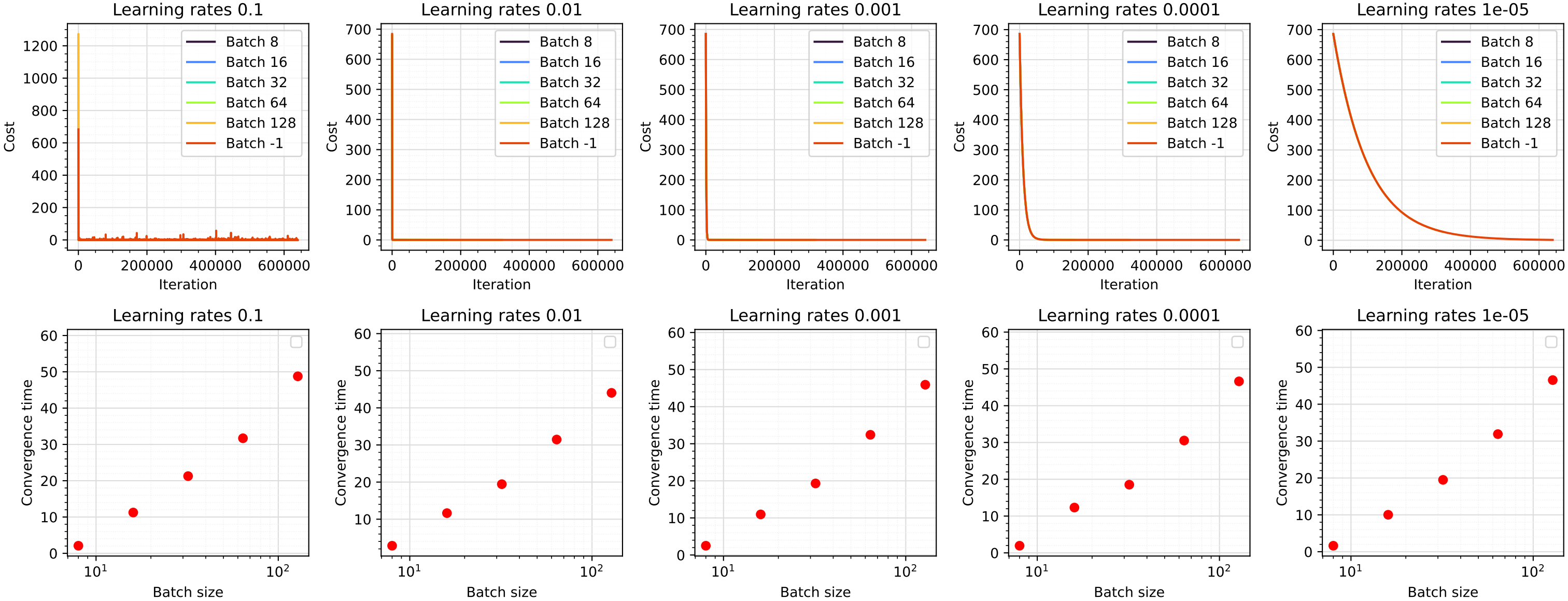


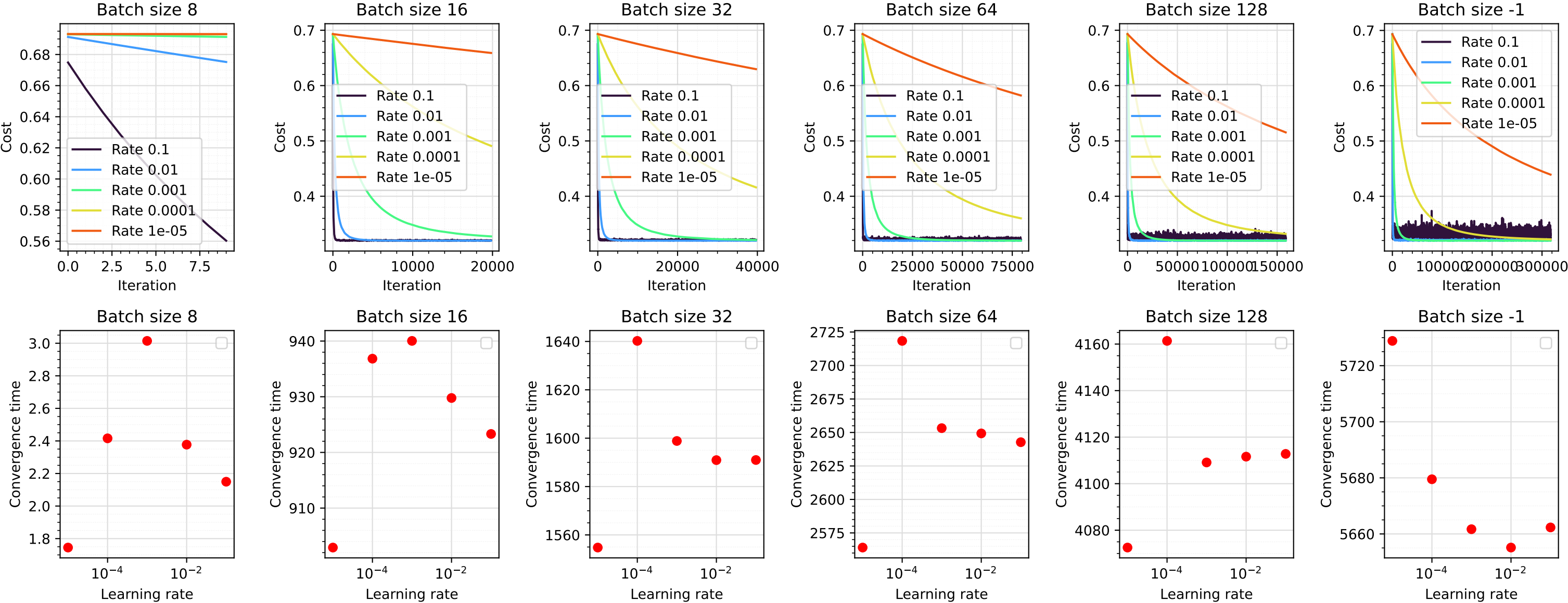
Row 1 shows the cost with respect to the number of iterations for different learning rates, while row 2 shows the time required to complete all the iterations. Each column represents a different batch size. This was done for the linear mini batch gradient descent with 5000 epochs.



Row 1 shows the cost with respect to the number of iterations for different batch sizes, while row 2 shows the time required to complete all the iterations. Each column represents a different learning rate. This was done for the linear mini batch gradient descent with 5000 epochs.

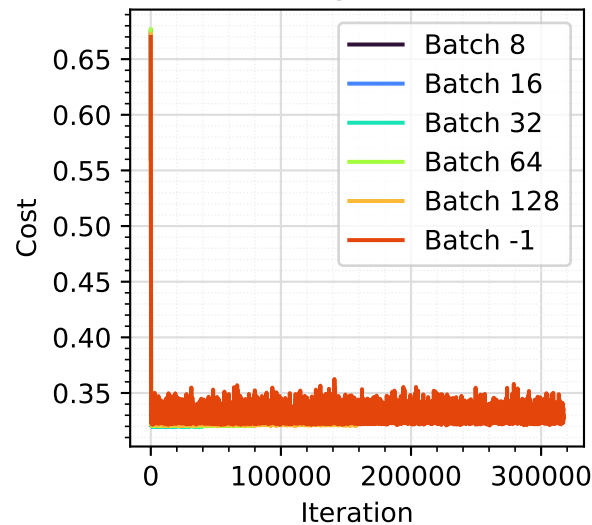


Row 1 shows the cost with respect to the number of iterations for different learning rates, while row 2 shows the time required to complete all the iterations. Each column represents a different batch size. This was done for the logistic mini batch gradient descent with 10 epochs.

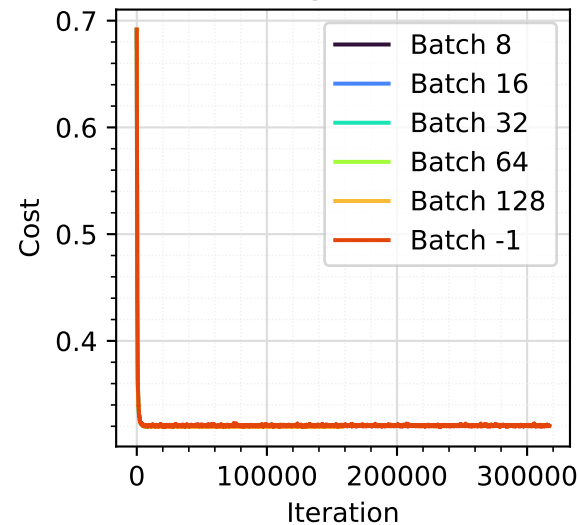


Row 1 shows the cost with respect to the number of iterations for different batch sizes, while row 2 shows the time required to complete all the iterations. Each column represents a different learning rate. This was done for the logistic mini batch gradient descent with 10 epochs.

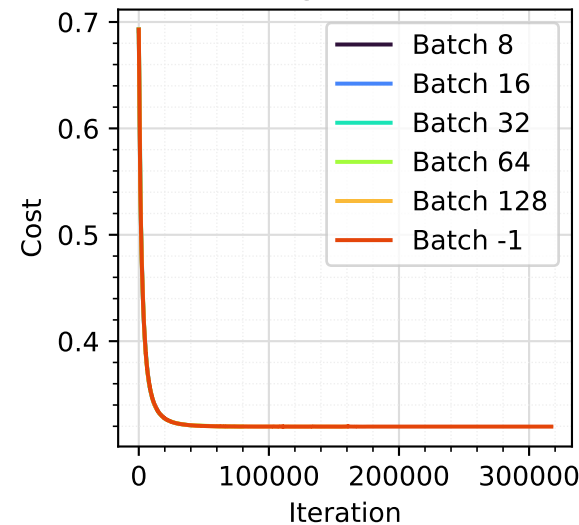
Learning rates 0.1



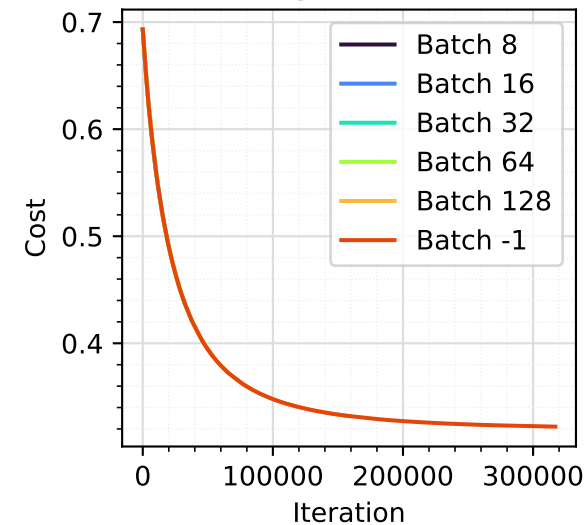
Learning rates 0.01



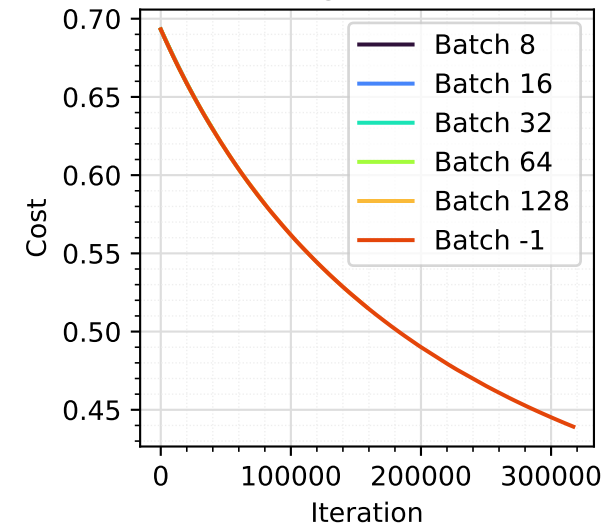
Learning rates 0.001



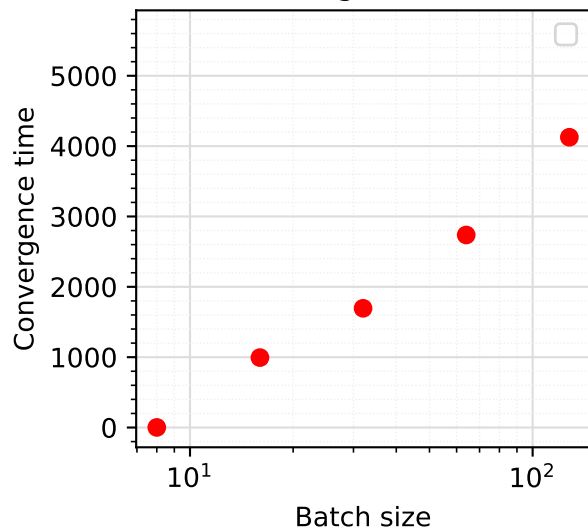
Learning rates 0.0001



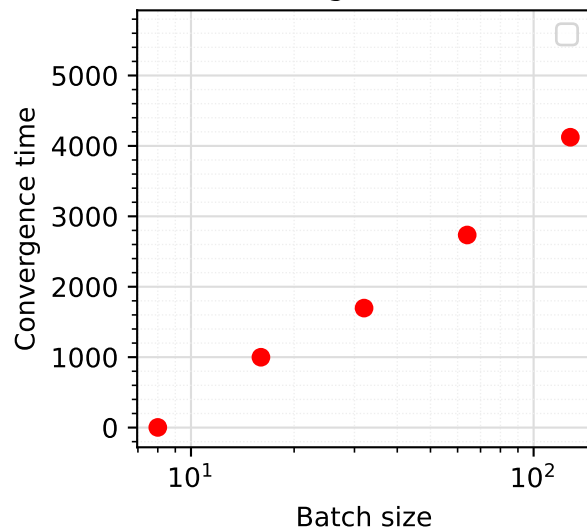
Learning rates 1e-05



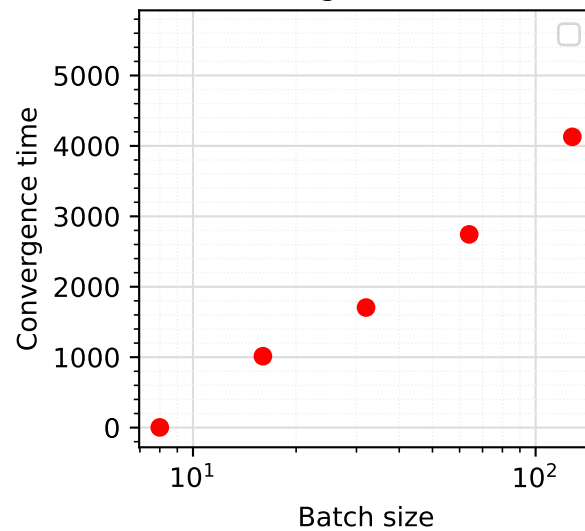
Learning rates 0.1



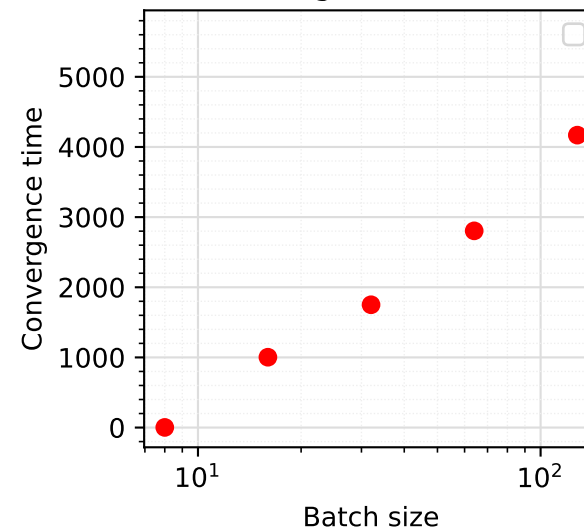
Learning rates 0.01



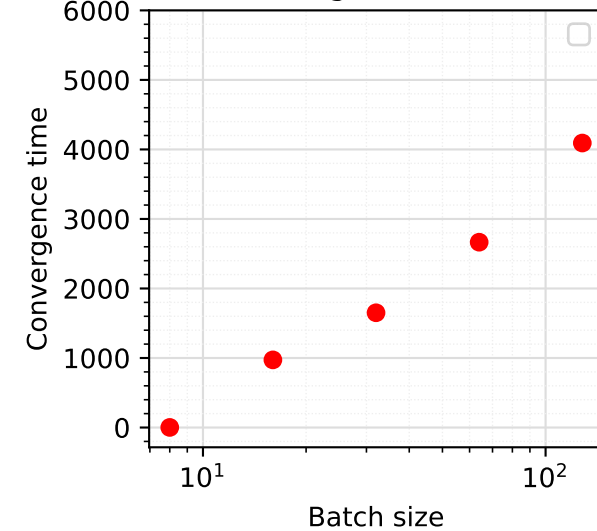
Learning rates 0.001



Learning rates 0.0001

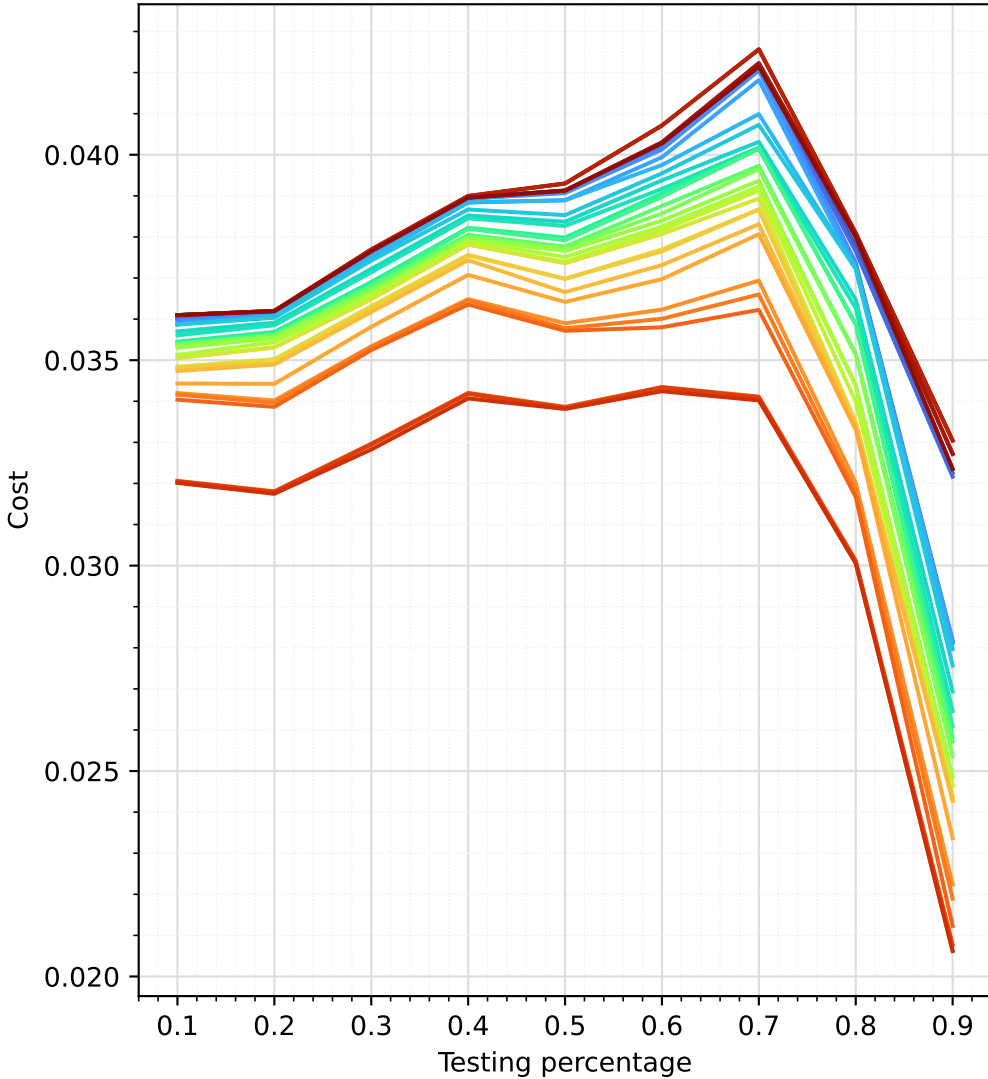


Learning rates 1e-05

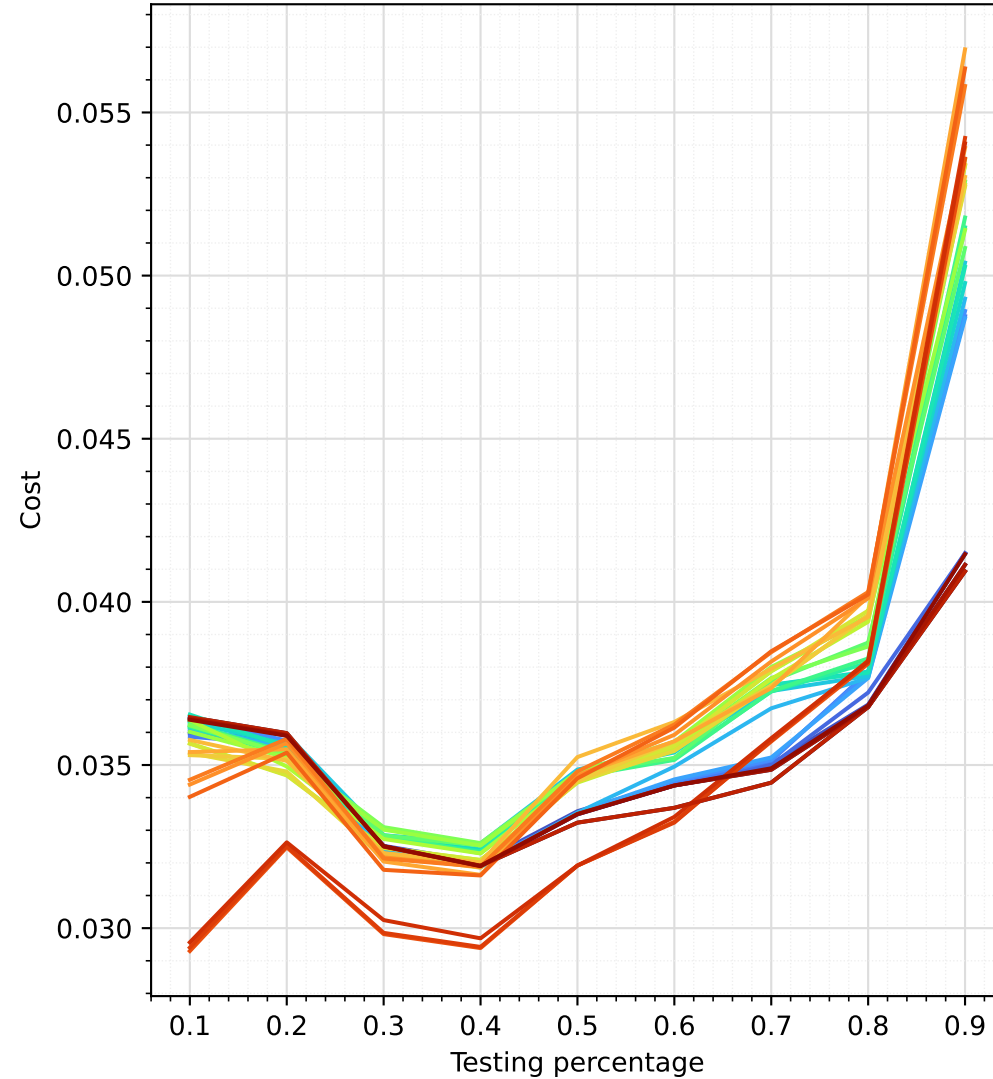


Cost of the training/testing data with respect to the percentage of testing data. Different colors represent different numbers of features included in the training (starting from the most correlated one alone and adding other features one by one). This was done for analytic linear regression.

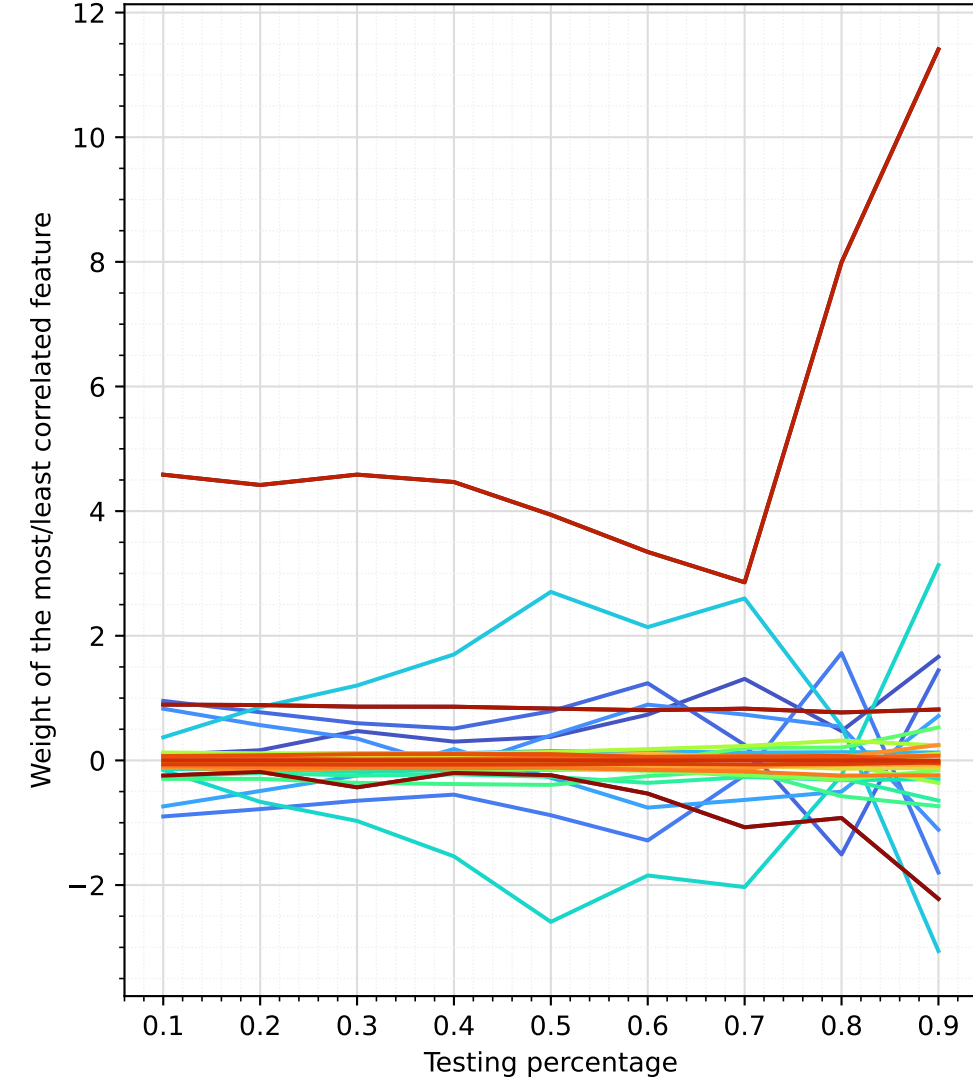
Train cost plot



Testing cost plot



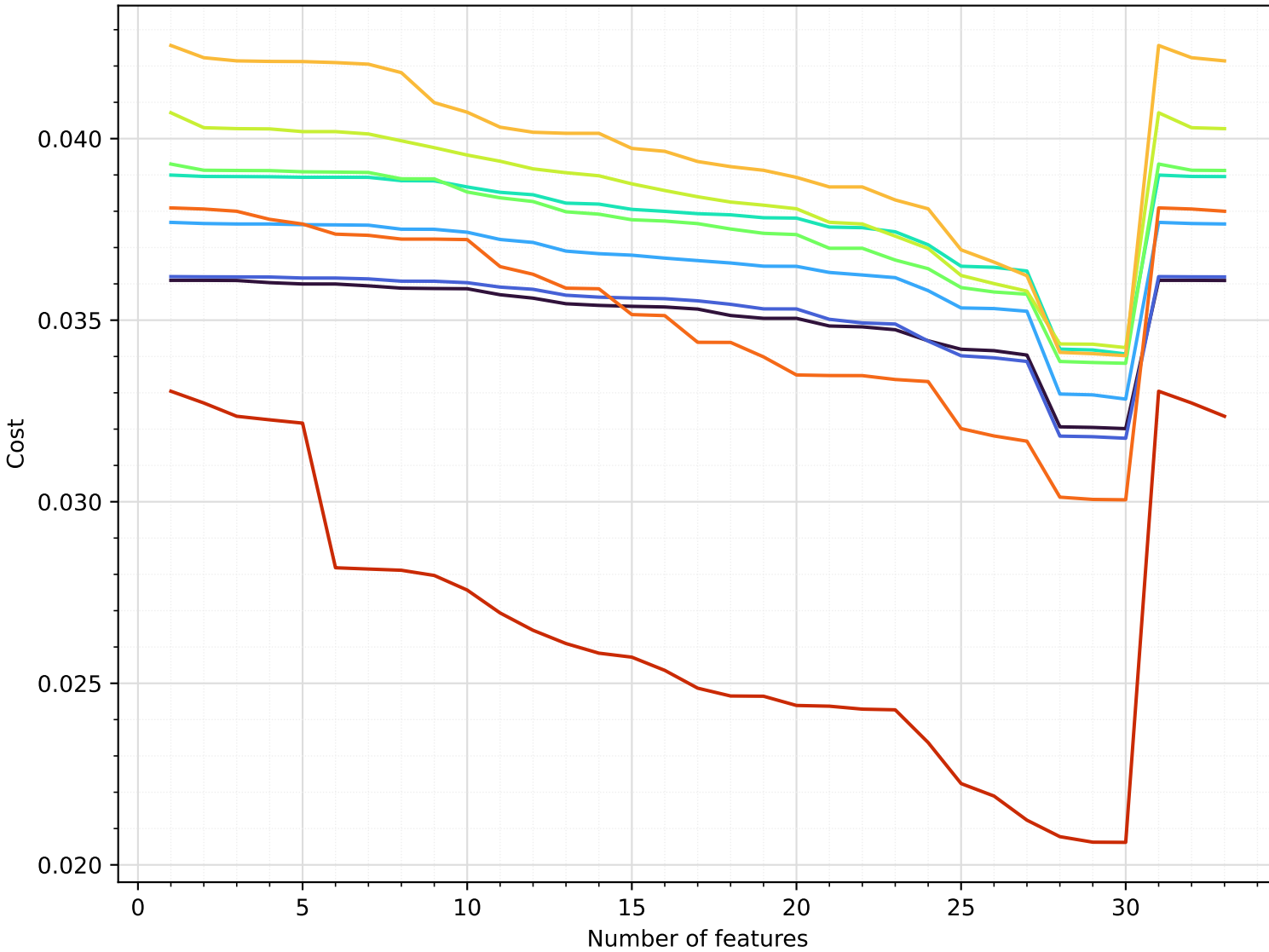
Weight plot



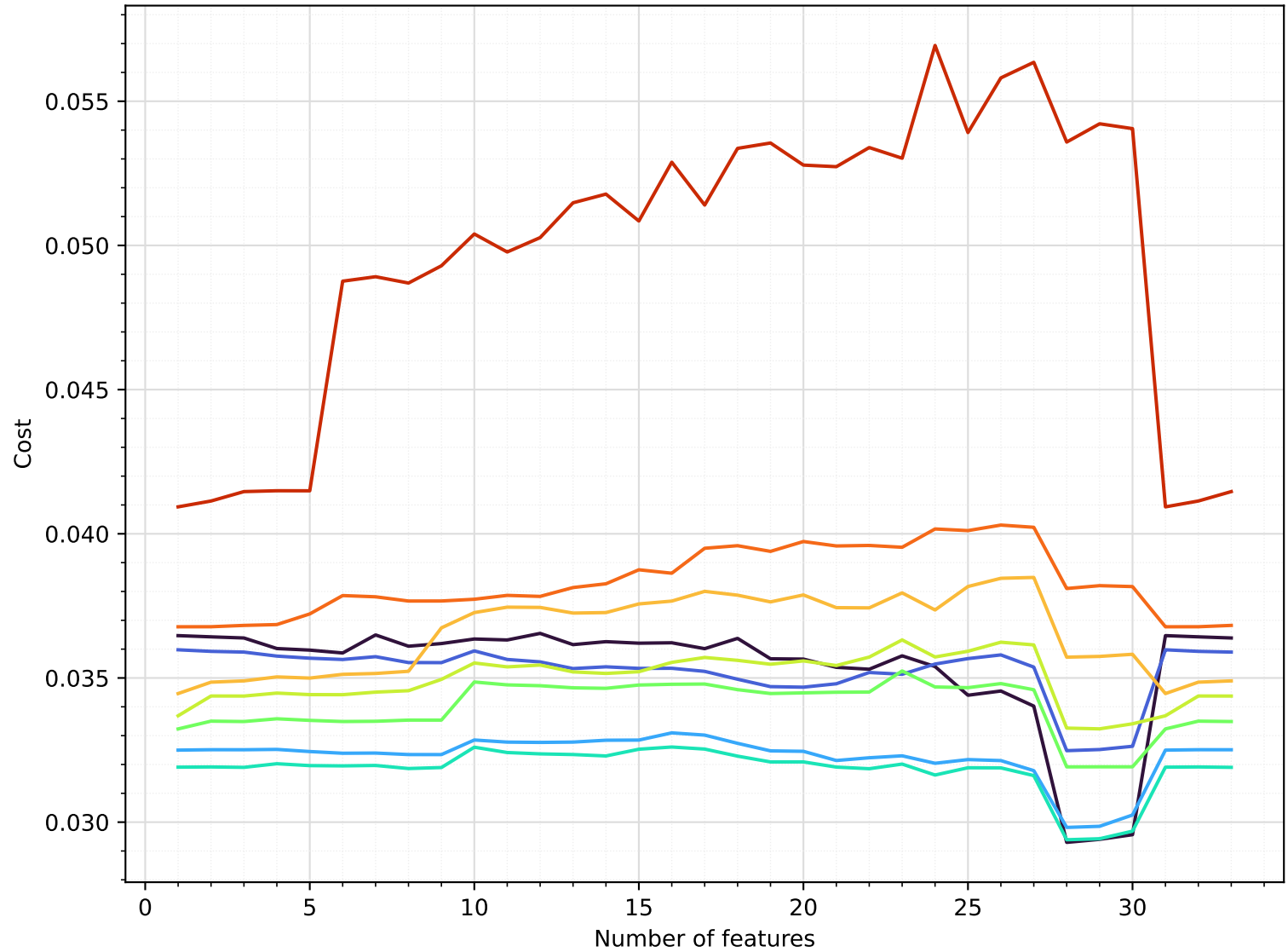


Cost of the training/testing data with respect to the number of features included in the training.  
Different colors represent different percentages of testing data. This was done for analytic  
linear regression.

Train cost plot

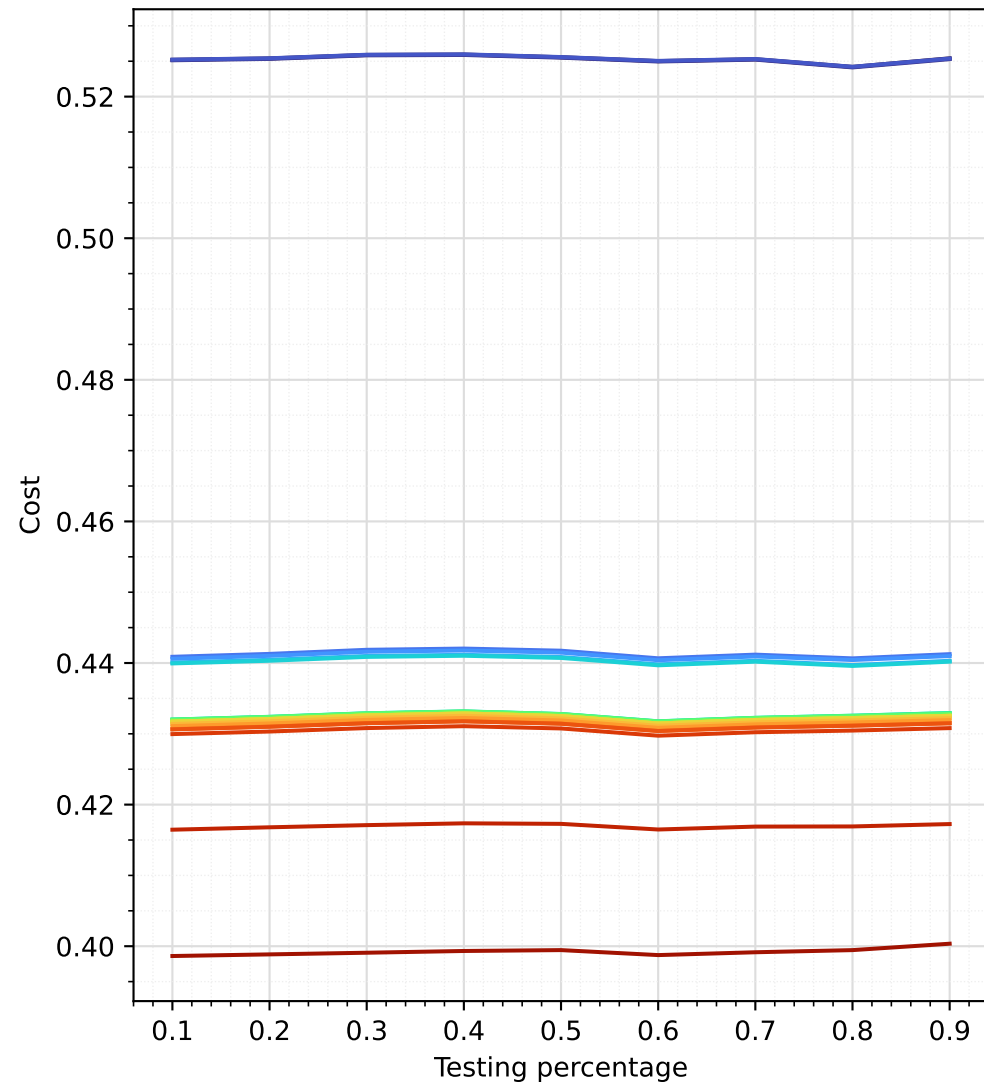


Testing cost plot

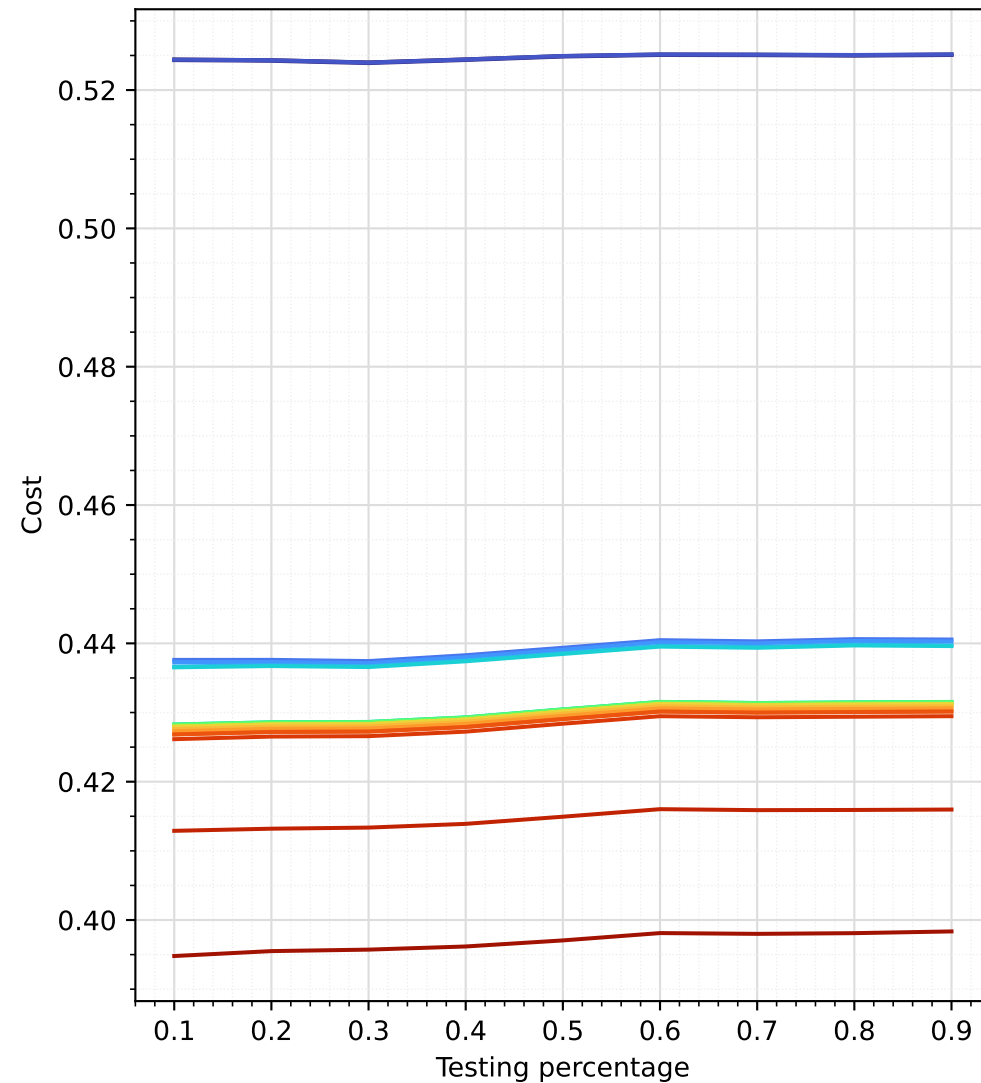


Cost of the training/testing data with respect to the percentage of testing data. Different colors represent different numbers of features included in the training (starting from the most correlated one alone and adding other features one by one). This was done for the full batch logistic regression with a learning rate of 0.01.

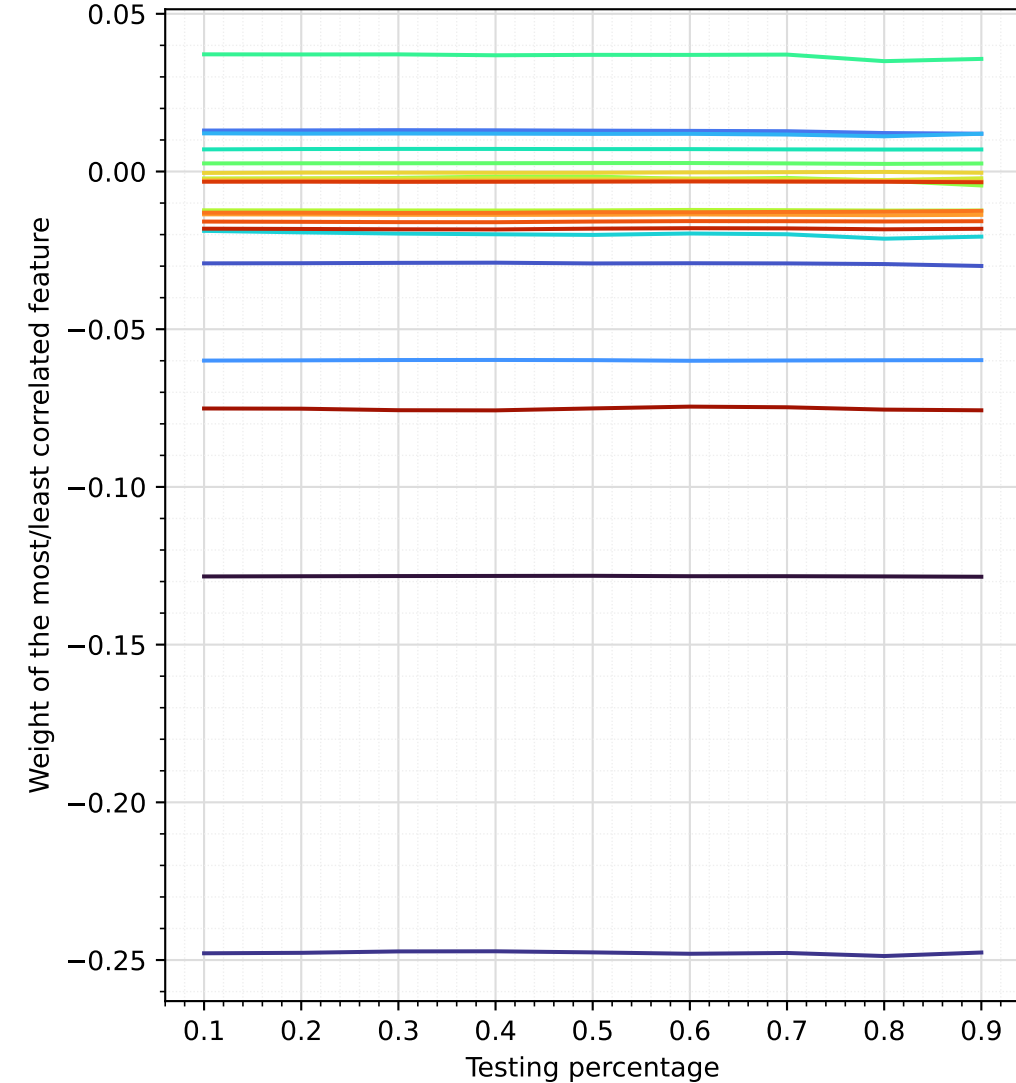
Train cost plot



Testing cost plot

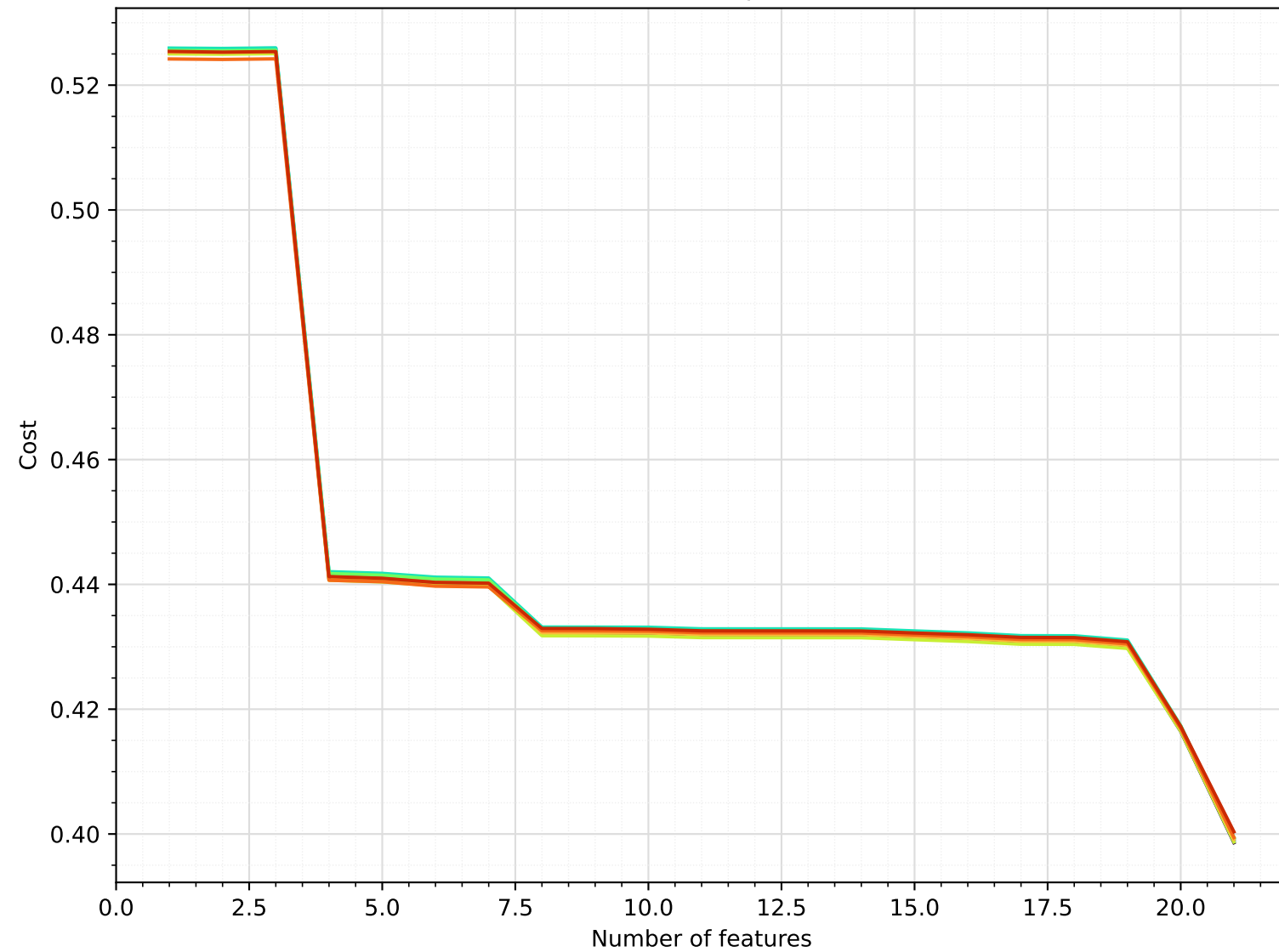


Weight plot

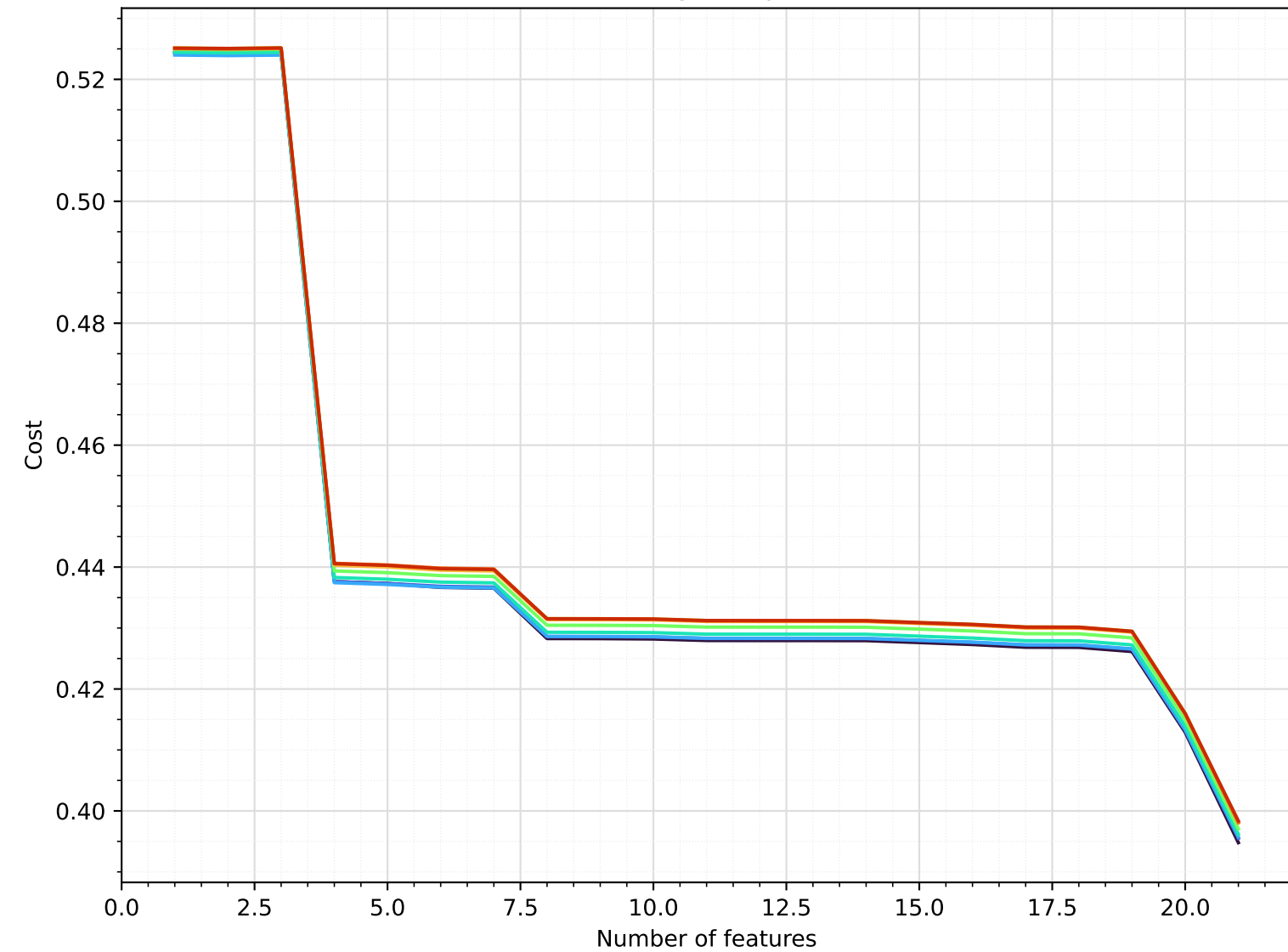


Cost of the training/testing data with respect to the number of features included in the training.  
Different colors represent different percentages of testing data. This was done for analytic  
logistic regression with a learning rate of 0.01.

Train cost plot



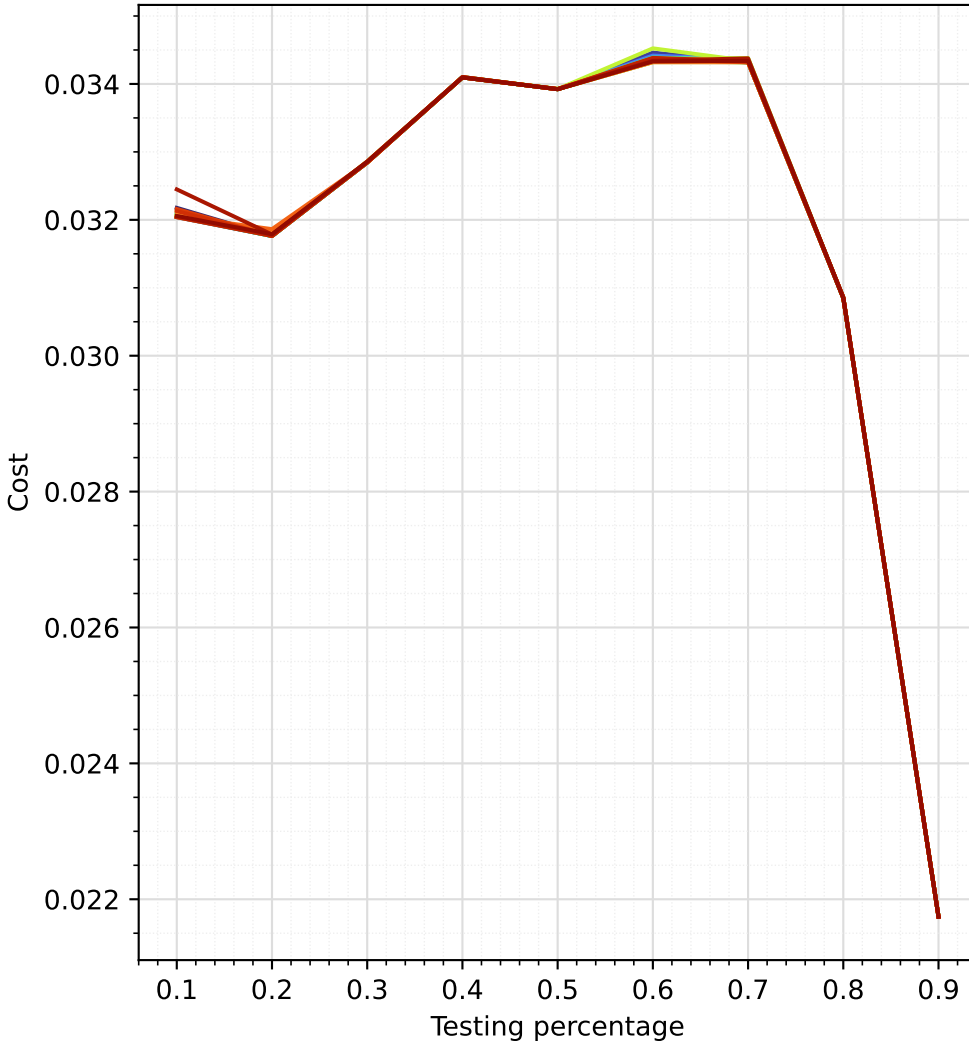
Testing cost plot



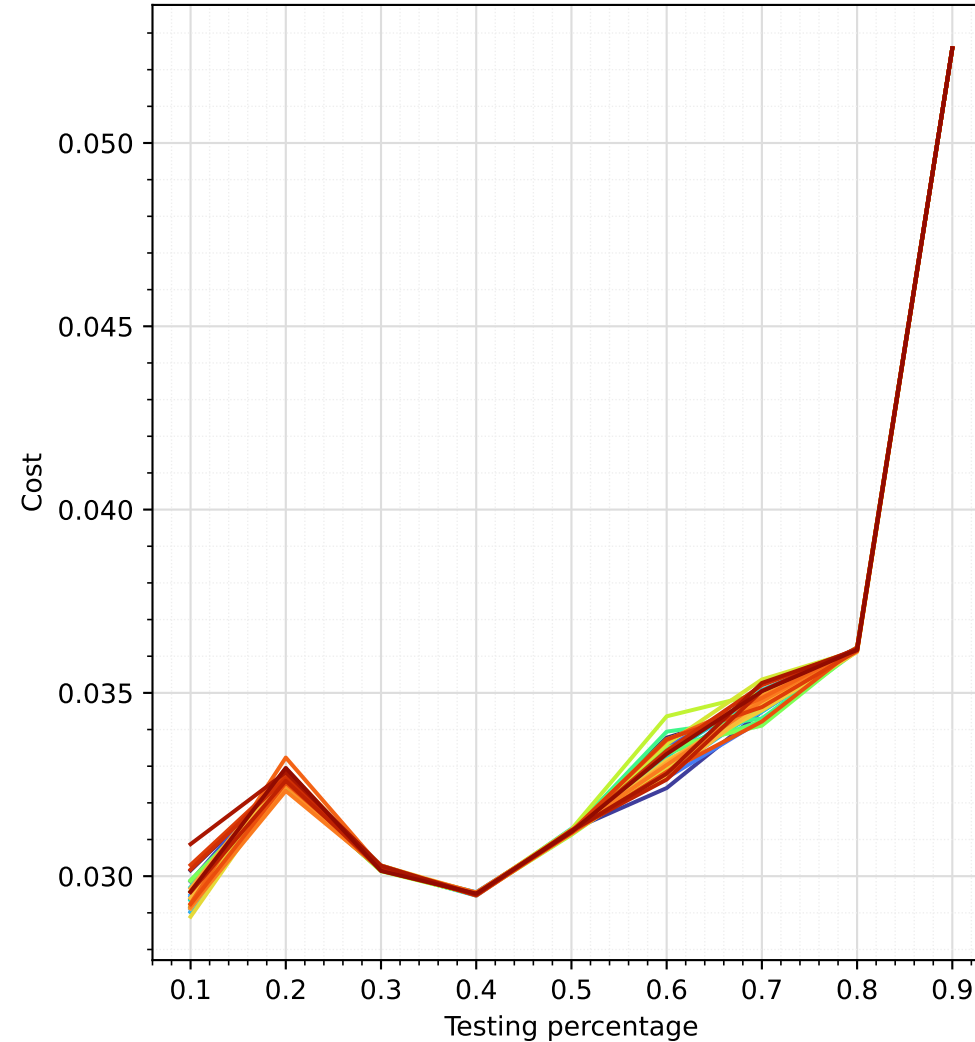


Cost of the training/testing data with respect to the percentage of testing data. Different colors represent different numbers of features included in the training (starting from the most correlated one alone and adding other features one by one). This was done for the mini batch stochastic gradient descent for linear regression with a learning rate of 0.01, mini batch size of 128, and number of epochs 75000.

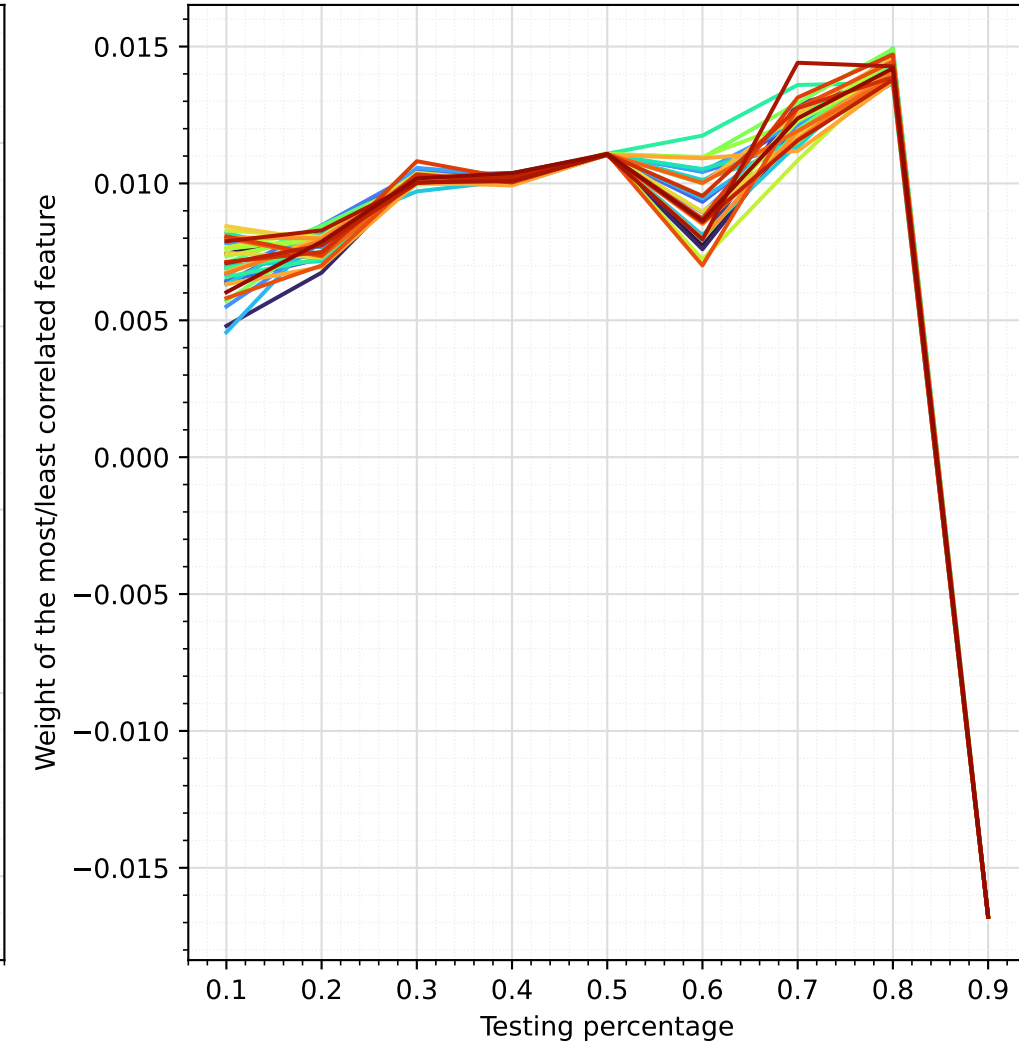
Train cost plot



Testing cost plot

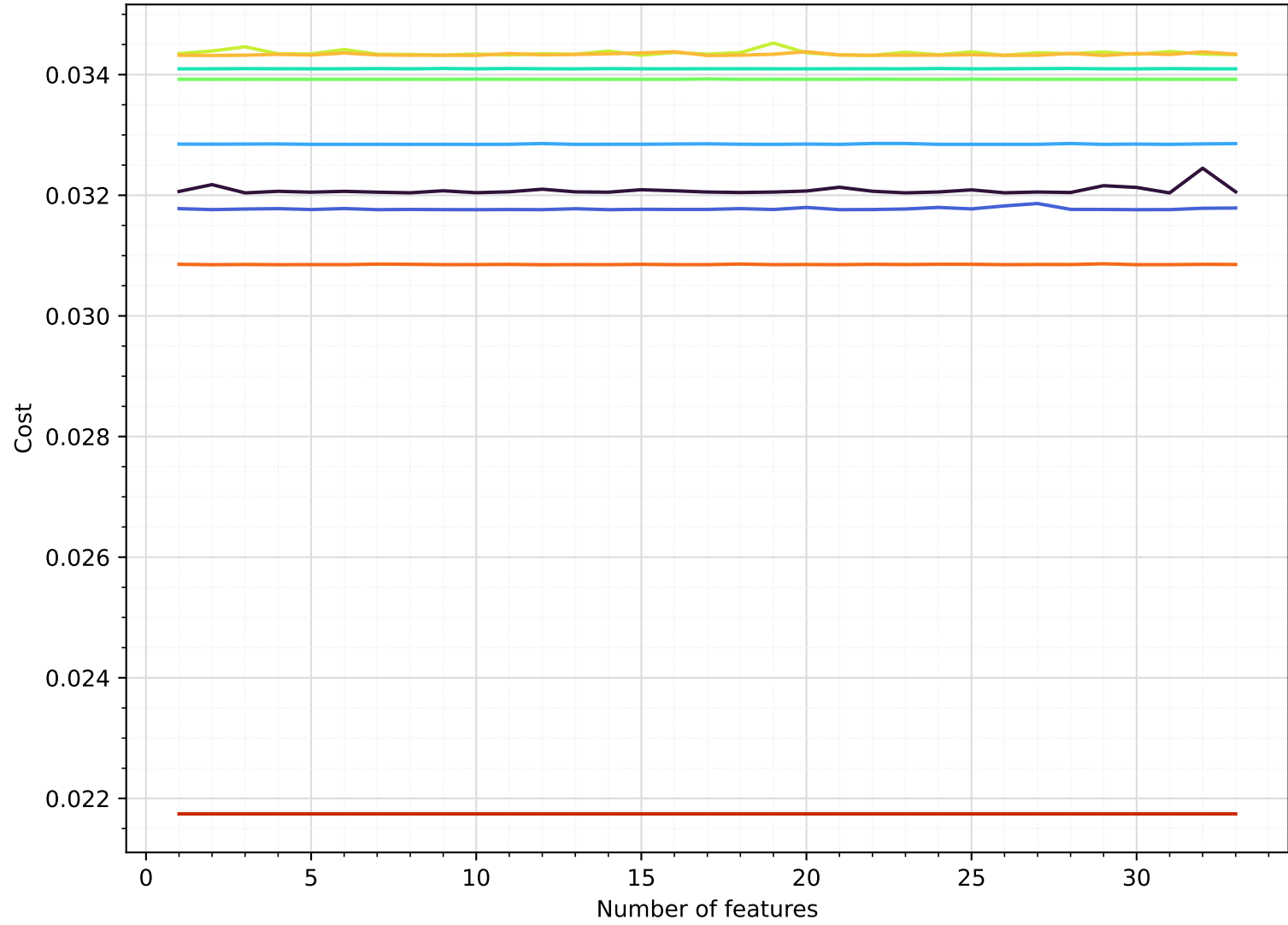


Weight plot



Cost of the training/testing data with respect to the number of features included in the training. Different colors represent different percentages of testing data. This was done for the mini batch stochastic gradient descent for linear regression with a learning rate of 0.01, mini batch size of 128, and number of epochs 75000.

Train cost plot



Testing cost plot

