

# Jax Controller Report

Group 128

## Conclusion

Initial weight parameters was set using Python's random library. The weights were set to a random number within the interval  $[0, 1)$ .

Training set MSE: 0.0392

Test set MSE: 0.0399

The result above was obtained with a learning rate of 0.001 and 1000 epochs.

Training set MSE: 0.0504

Test set MSE: 0.0517

The result above was obtained after setting the amount of epochs to 100 instead of 1000. Still using a learning rate of 0.001.

Training set MSE: 0.0389

Test set MSE: 0.0383

The best results was obtained with a learning rate of 0.05 and 1000 epochs. Slightly better than a learning rate of 0.001

## Lotka-Volterra Population Plant