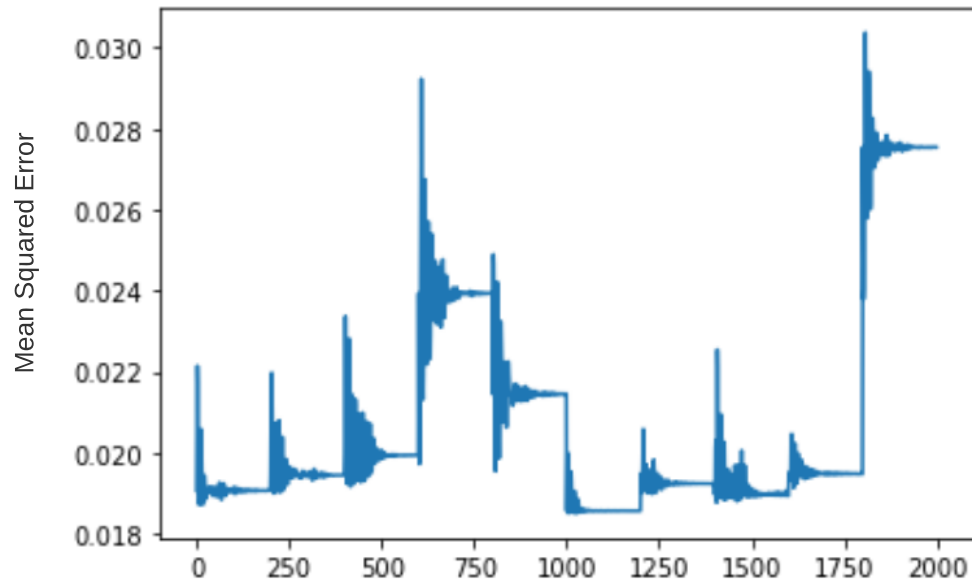## Linear Function Approximation with Sigmoid Activation
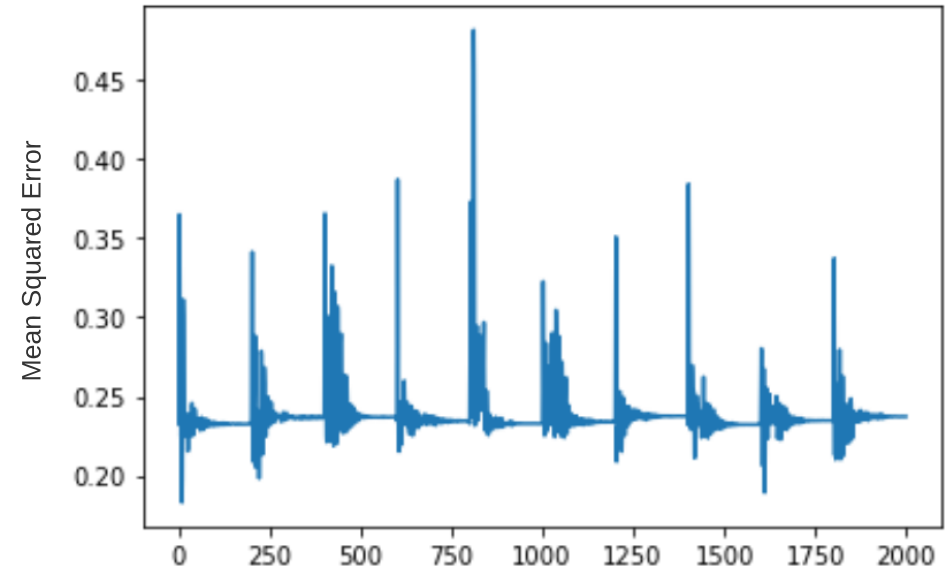
10 Independent Experiments

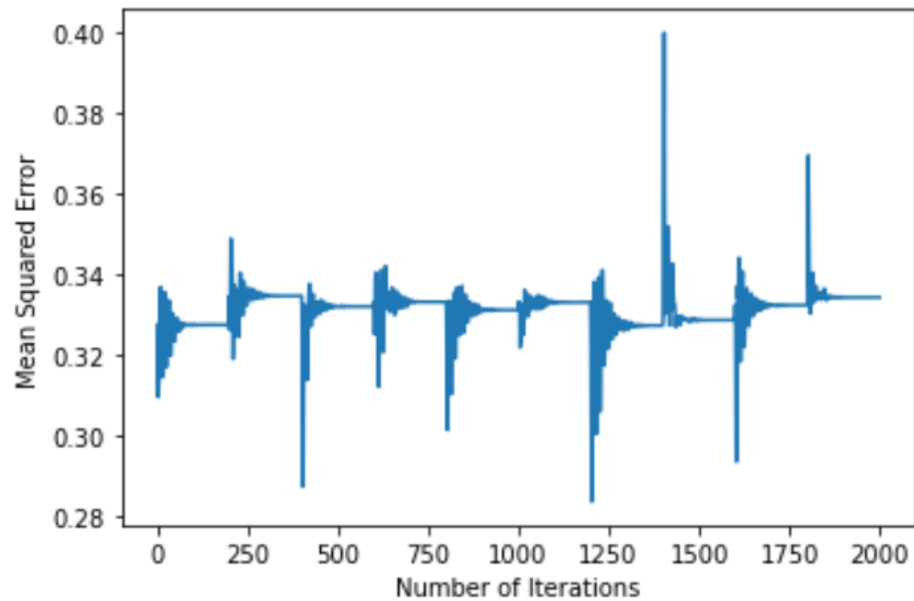Number of Iterations over 10 experiments (each with 200 iterations)

Linear Function Approximation with Tanh Activation

10 Independent Experiments

Number of Iterations over 10 experiments (each with 200 iterations)

Linear Function Approximation with Linear Activation

over 10 experiments (each with 200 iterations)

Figure 2

Linear function approximation:

PSO parameters	Sigmoid activation function	Hyperbolic Tangent activation function	Linear activation function
Swarm size	100	100	100
Informants	6	6	6
Epsilon	0.2	0.2	0.15
Alpha range	0.92	0.89 to 0.9	0.9
Position range	-0.2 to 0.2	0.04 to 0.08	-0.01 to 0.08
Velocity range	0.05 to 0.25	0.6 to 0.9	0.1 to 0.9
Cognitive component	1	1.1	0.9
Social component	3	3.9	3
Hidden Layer nodes	5	5	5
Least MSE (approx)	0.019	0.23	0.32