**Difference Between a Batch and an Epoch in a Neural Network**

* **Batch Gradient Descent**: Batch Size = Size of Training Set
* **Stochastic Gradient Descent:** Batch Size = 1
* **Mini-Batch Gradient Descent:** 1 < Batch Size < Size of Training Set

**Summary**

* Stochastic gradient descent is an iterative learning algorithm that uses a training dataset to update a model
* The batch size is a hyperparameter of gradient descent that controls the number of training samples to work through before the model’s internal parameters are updated
* The number of epochs is a hyperparameter of gradient descent that controls the number of complete passes through the training dataset