**Overfitting:**

Overfitting occurs when instead of attempting to create a line of best fit for the overall data you attempt to match your line perfectly to the data which ends up in an overly complex model that doesn’t accurately represent or predict anything outside the data it is fitted to. A common example of this in is in machine learning where a model is trained on a training set of data but the model is improperly written such that instead of learning a generalized version of the training data set it instead memorizes the training data and thus performs poorly on the test data set and is generally unusable as you’ve essentially created an overly complex lookup table for the training data.

**Overparameterization:**

Overparameterization occurs when the model you’re making has more parameters than the data you are using has data points. An example would be if your data was a simple set with 2 data points A and B but you create your model to have A,B and C parameters then overparametrization has occurred because in effect you’ve created a parameter that didn’t really need to exist. In most cases in such a scenario a 2 parameter model would fit to the data just as well as the 3 parameter, as such the 3rd parameter has effectively become a useless constant that would not impact the models performance if it was just set to 0.