

Comparison between MLP and CMAC

1. CMAC requires more parameters than MLP
2. CMAC is often over-parameterized for the training data, so the MLP has a smoother representation which ignores noise and corresponds better to the underlying structure of data.
3. The number of CMAC weights required to represent a given training set is proportional to the volume spanned by that data in the input space.
4. The CMAC can be more easily trained on-line than MLP. The training iterations are fast. The rate of convergence to the training data can be made as high as required.
5. The MLP also requires many iterations to converge, regardless of its learning rate.
6. CMAC is not sensitive to the order of input data.