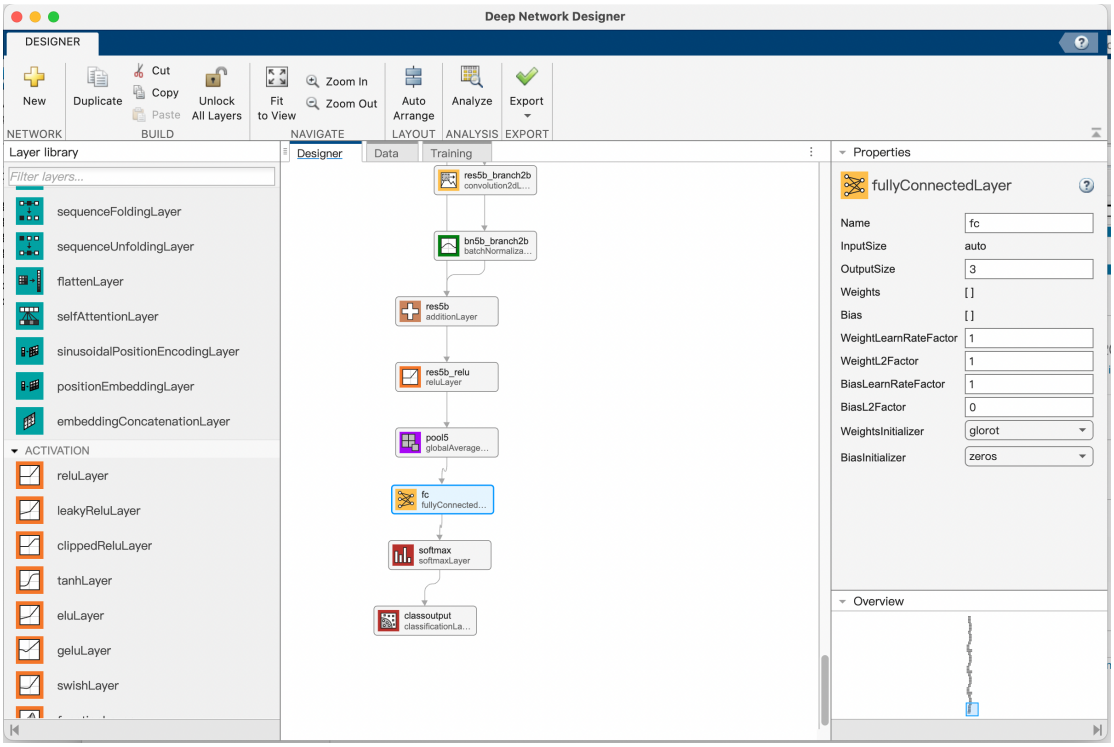

Fully Connected Layer (fullyConnectedLayer)

The fully connected layer, also known as a dense layer, is a crucial component in neural networks, particularly towards the end of the network.

It performs a linear transformation of the input features followed by an optional activation function. The transformation can be represented as:y=Wx+by=Wx+b where W is the weight matrix, x is the input vector, and b is the bias vector.

Softmax Layer (softmaxLayer)

The softmax layer is usually placed immediately after the final fully connected layer in classification networks.

Ensures that the output probabilities sum to 1 and are within the range [0, 1], making the outputs interpretable as probabilities. Suitable for multi-class classification tasks.

Classification Layer (classificationLayer)

The classification output layer is used in neural networks for classification tasks. It computes the loss and evaluates the accuracy during training and validation.

Provides feedback to the network during training, guiding the adjustment of weights through backpropagation to minimize the loss.