Network 1 Residual Attention Network(Attention 56)

Input: Image
Output: Labels
Processing:
1.ImageDataGenerator
1.1 Rotate
1.2 Shift
1.3 Flip
2.Normalize
end Processing:

Preparation Phase

Input: Image Tensor ▷ Shape: 32×32
Processing: ▷ Output Size
1. Padding ▷ 40×40
2. Cropping ▷ 32×32
3. Convolution ▷ 16×16
4. MaxPooling ▷ optional
end Processing:

Stage 1

Input: Image Tensor, Filter, residual unit type
Processing: ▷ Output Size
1. Residual Unit ▷ 16×16
2. Attention Module A * 1 ▷ 16×16
end Processing:

Stage 2

Input: Image Tensor, Filter, residual unit type
Processing: ▷ Output Size
1. Residual Unit-Downsampling ▷ 8×8
2. Attention Module B * 1 ▷ 8×8
end Processing:

Stage 3

Input: Image Tensor, Filter, residual unit type
Processing: ▷ Output Size
1. Residual Unit-Downsampling ▷ 4×4
2. Attention Module C * 1 ▷ 4×4
end Processing:

Ending Phase

Input: Image Tensor, Filter, residual unit type
Processing: ▷ Output Size
1. Residual Unit-Downsampling ▷ 2×2
2. Residual Unit * 2 ▷ 2×2
2. Average Pooling ▷ 1×1
3. Fully Connected
end Processing: Output Size