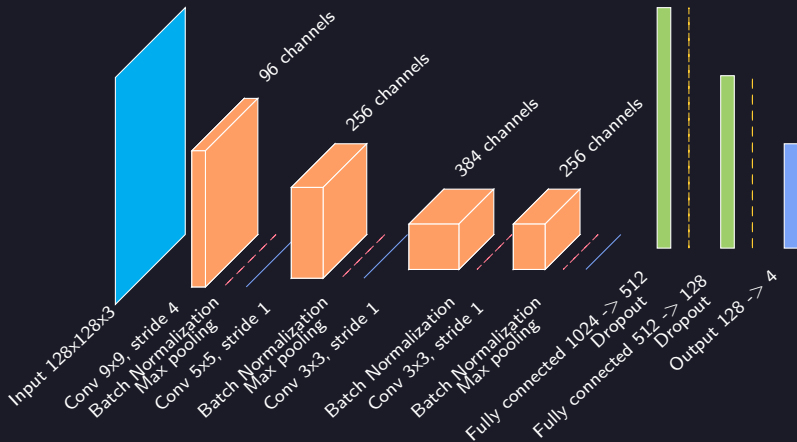


Custom CNN Architecture

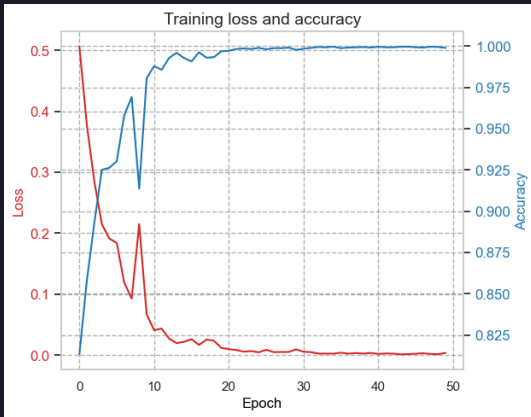


Training Details

Training parameters:

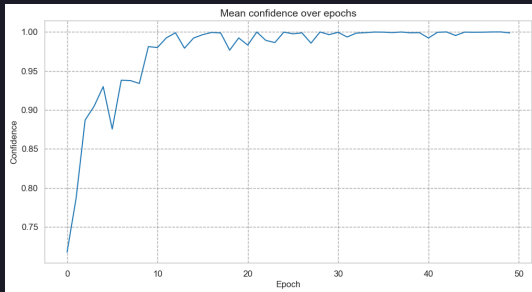
- **Epochs:** 50
- **Batch size:** 64
- **Learning rate:** 1×10^{-4}
- **Optimizer:** Adam (weight decay 1×10^{-5})
- **Scheduler:** stepLR (step size 10, gamma 0.5)
- **Loss function:** Cross-entropy
- **Activation function:** Mish
- **Dropout rate:** 0.4
- **Image size:** 128×128

Training Loss and Accuracy



- Final training loss: 3.6×10^{-3}
- Final training accuracy: 99.9%

Confidence and Test Accuracy



- Final training confidence: 99.9%
- Final test confidence: 99.9%
- Final test accuracy: 99%