

Training Log Interpreter

This notebook parses and visualizes training logs from the Int2Int model training. It extracts model parameters, task information, and plots metrics over epochs.

Configuration

Specify the path to your training log file:

Parse Training Log

Parsed 102 parameters and 207 epoch logs

Report Model Configuration and Training Parameters

MODEL CONFIGURATION AND TRAINING PARAMETERS

- EXPERIMENT INFO

Experiment Name: mu
Experiment ID: 1
Task Type: MU
Operation: data

- DATA

Training Data: /mnt/c/Users/ziwen/clair/mobius_case_study/input/input_dir_interCRT100_with_n_natural/mu_interCRT100_with_n_natural.txt.train
Eval Data: /mnt/c/Users/ziwen/clair/mobius_case_study/input/input_dir_interCRT100_with_n_natural/mu_interCRT100_with_n_natural.txt.test
Data Types: int[201]:range(-1,2)
Base: 1000
Modulus: 67

- MODEL ARCHITECTURE

Architecture: encoder_decoder
Encoder Layers: 4
Decoder Layers: 4
Encoder Embedding Dim: 256
Decoder Embedding Dim: 256
Encoder Heads: 8
Decoder Heads: 8
Dropout: 0
Attention Dropout: 0

- TRAINING PARAMETERS

Optimizer: adam_inverse_sqrt,lr=0.00025
Batch Size: 96
Eval Batch Size: 128
Epoch Size: 50000
Max Epochs: 201
Eval Size: 10000
Gradient Clipping: 5
Max Length: 512
Max Output Length: 512

- OTHER SETTINGS

FP16: False
CPU Mode: False
Multi-GPU: False
Num Workers: 0

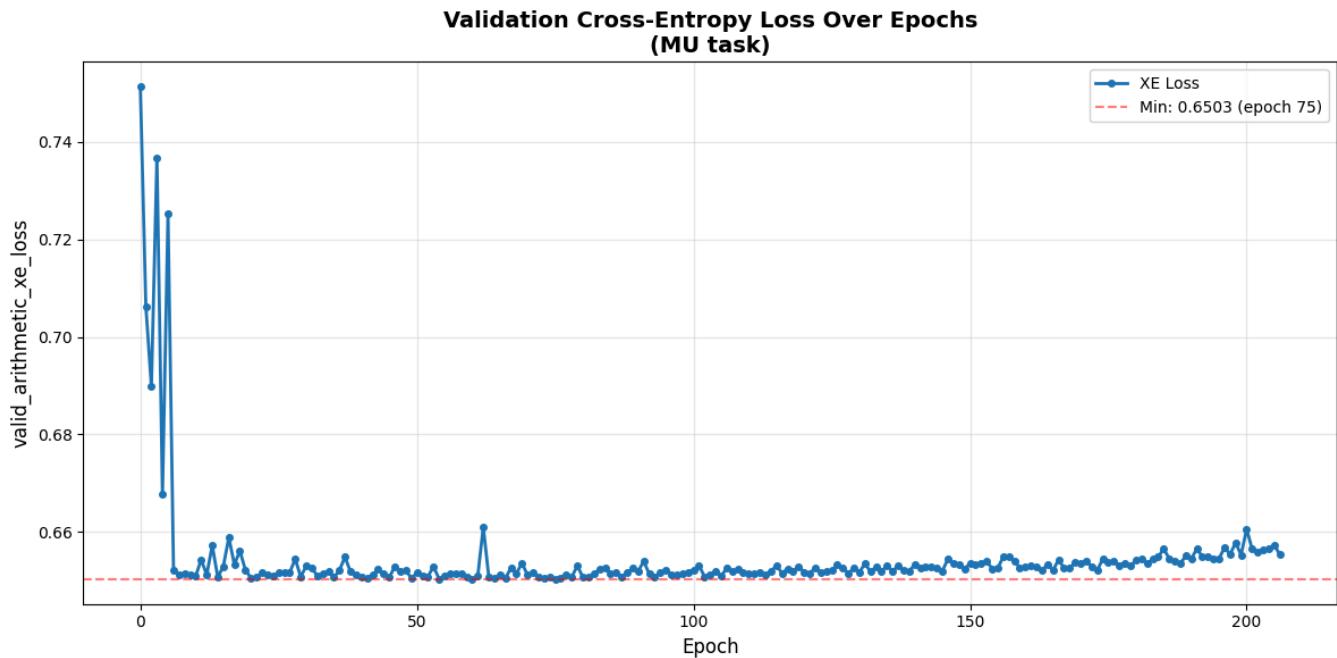
Convert Metrics to DataFrame

Total epochs recorded: 207

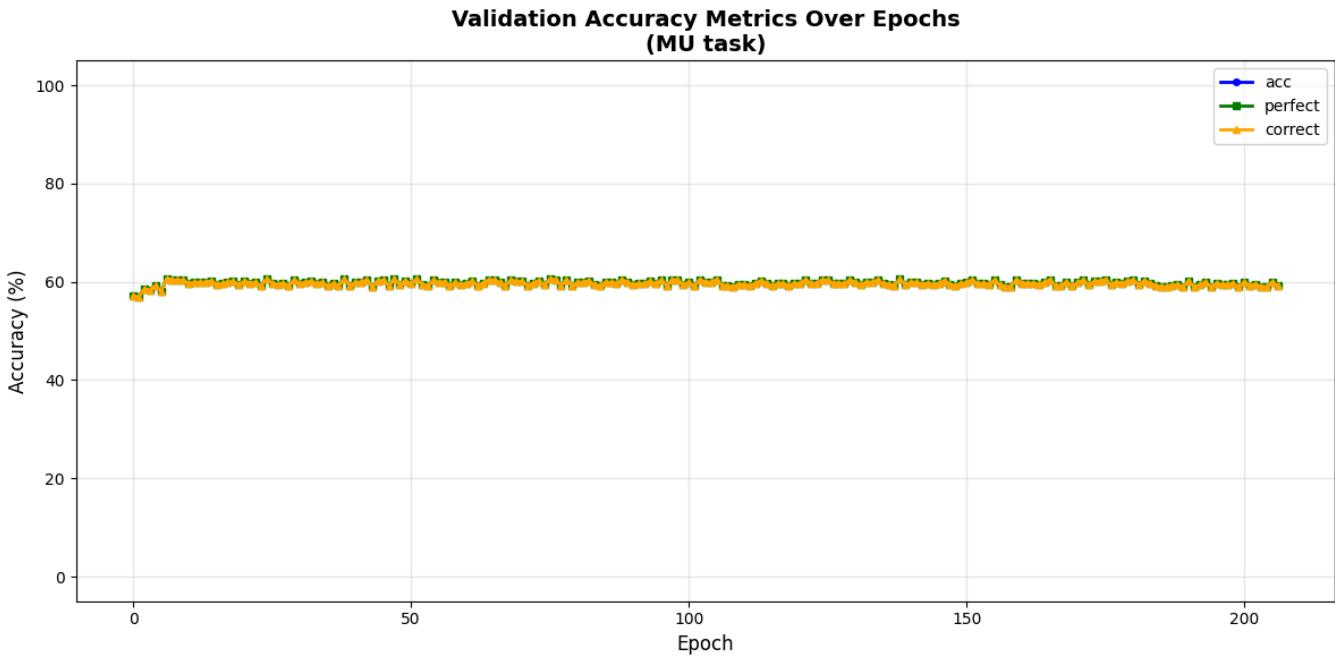
First few epochs:

epoch	valid_arithmetic_xe_loss	valid_arithmetic_acc	valid_arithmetic_perfect	valid_a
0	0.751308	57.10	57.10	
1	0.706245	56.95	56.95	
2	0.689803	58.60	58.60	
3	0.736733	58.34	58.34	
4	0.667658	59.23	59.23	
5	0.725268	57.97	57.97	
6	0.652125	60.60	60.60	
7	0.651252	60.47	60.47	
8	0.651536	60.30	60.30	
9	0.651135	60.27	60.27	

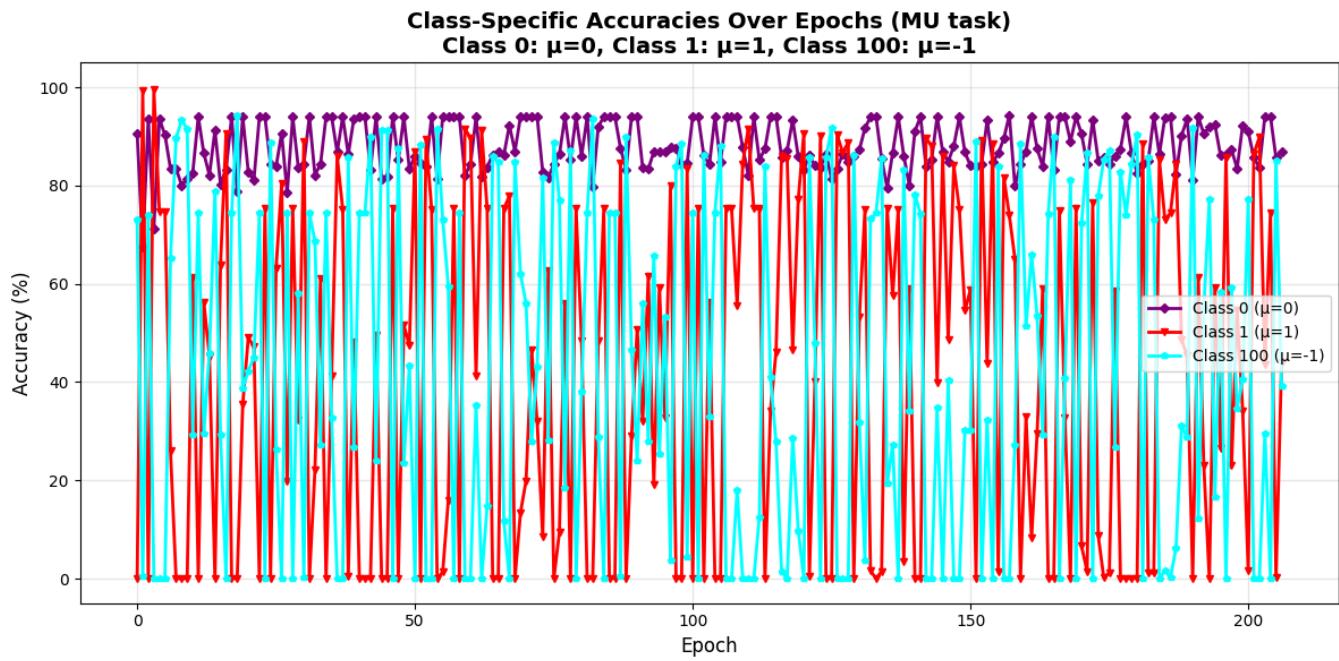
Plot 1: Cross-Entropy Loss



Plot 2: Accuracy Metrics (acc, perfect, correct)



Plot 3: Class-specific Accuracies (acc_0, acc_1, acc_100)



Best Metrics Report

BEST METRICS ACROSS ALL EPOCHS

□ CROSS-ENTROPY LOSS

Best Loss: 0.650314
Achieved at Epoch: 75

□ ACCURACY METRICS

ACC:

Best: 60.60%
Achieved at Epoch: 6

PERFECT:

Best: 60.60%
Achieved at Epoch: 6

CORRECT:

Best: 60.60%
Achieved at Epoch: 6

□ CLASS-SPECIFIC ACCURACIES

Class 0 ($\mu=0$):

Best: 94.33%
Achieved at Epoch: 157

Class 1 ($\mu=1$):

Best: 99.45%
Achieved at Epoch: 3

Class 100 ($\mu=-1$):

Best: 94.36%
Achieved at Epoch: 18

□ LATEST EPOCH METRICS:

Epoch: 206.0
XE Loss: 0.655388
Accuracy: 59.24%
Perfect: 59.24%
