Week 8 Presentation

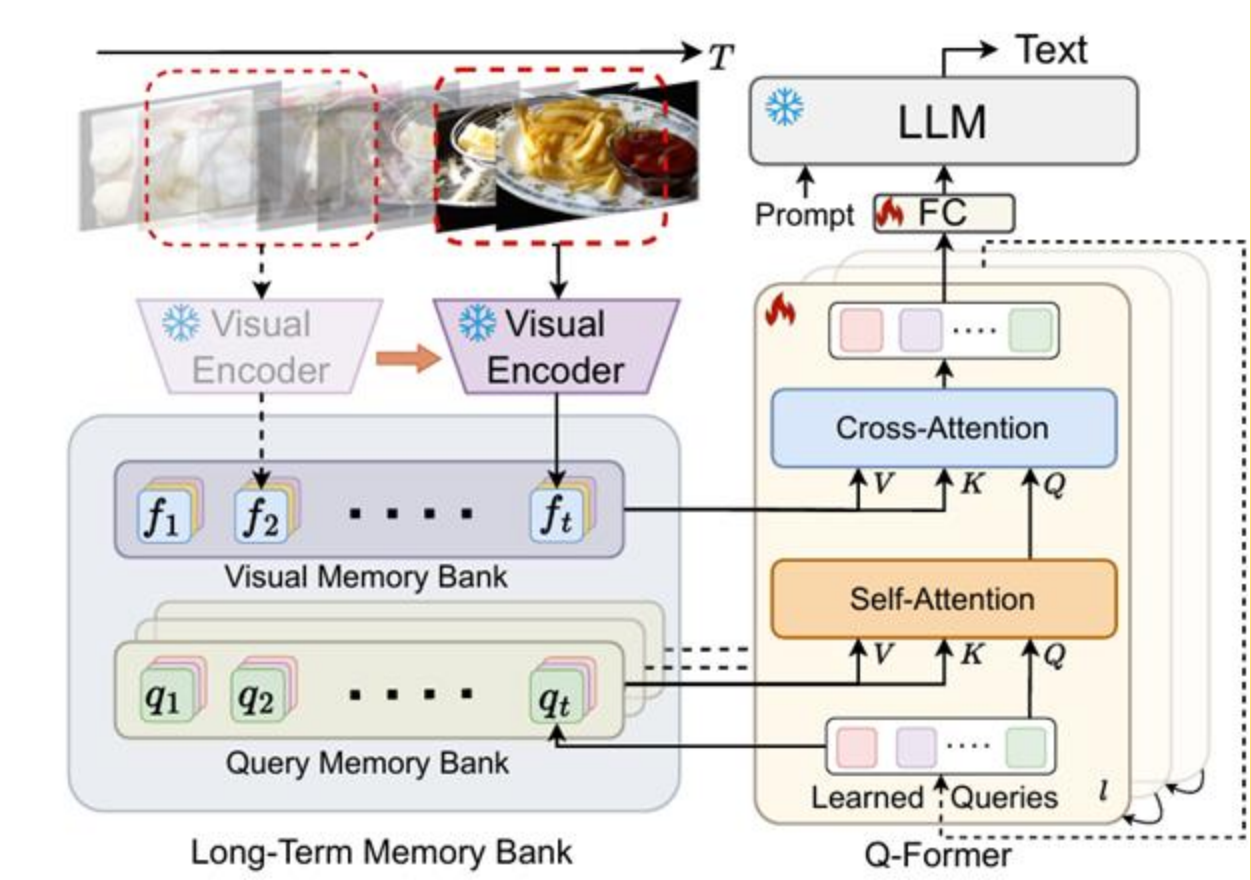
Slow-Fast Weights for Long-Term Video Understanding
Rajat Modi, Dr. Rawat

David Gardner, July 17 2025

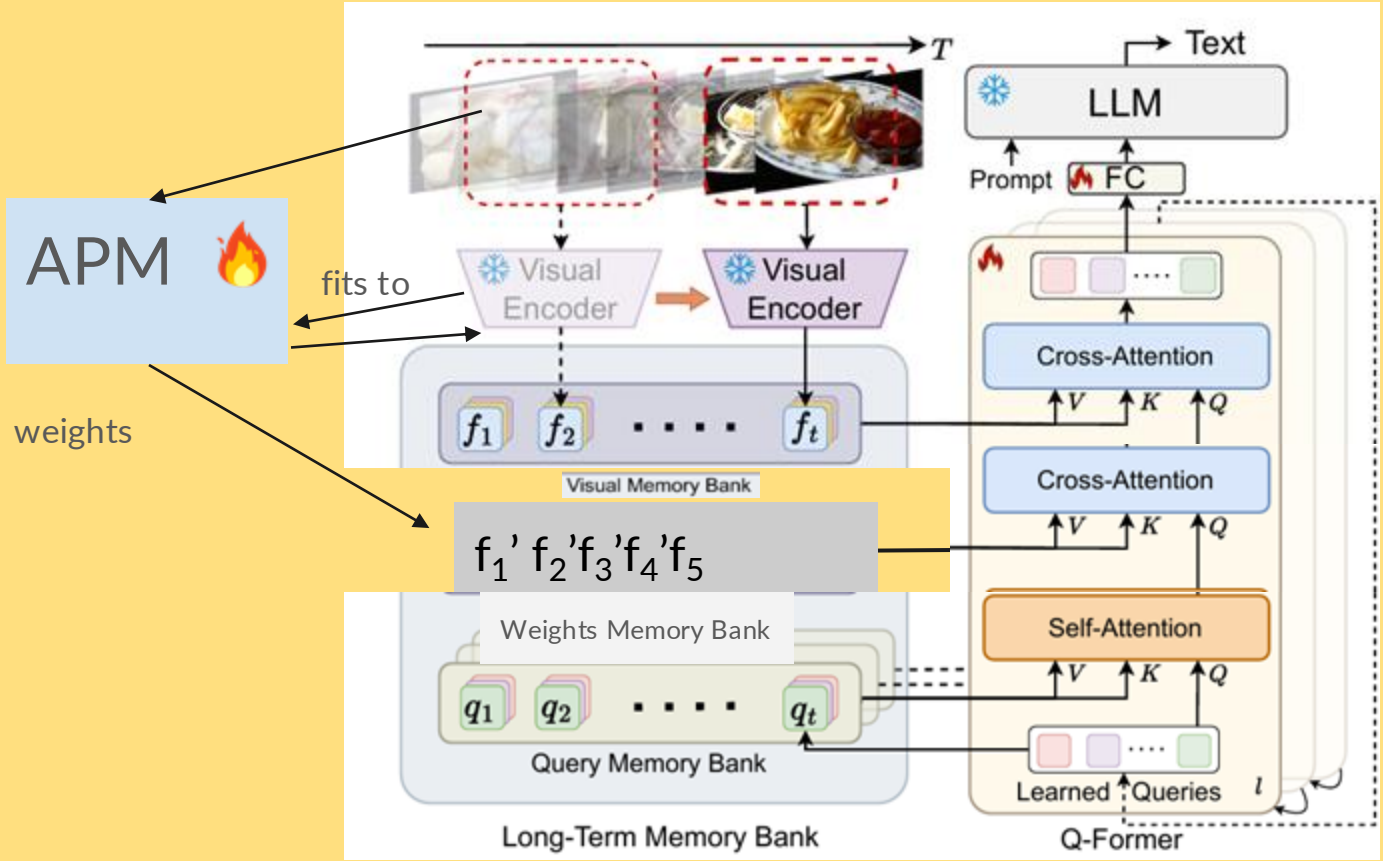
This Week

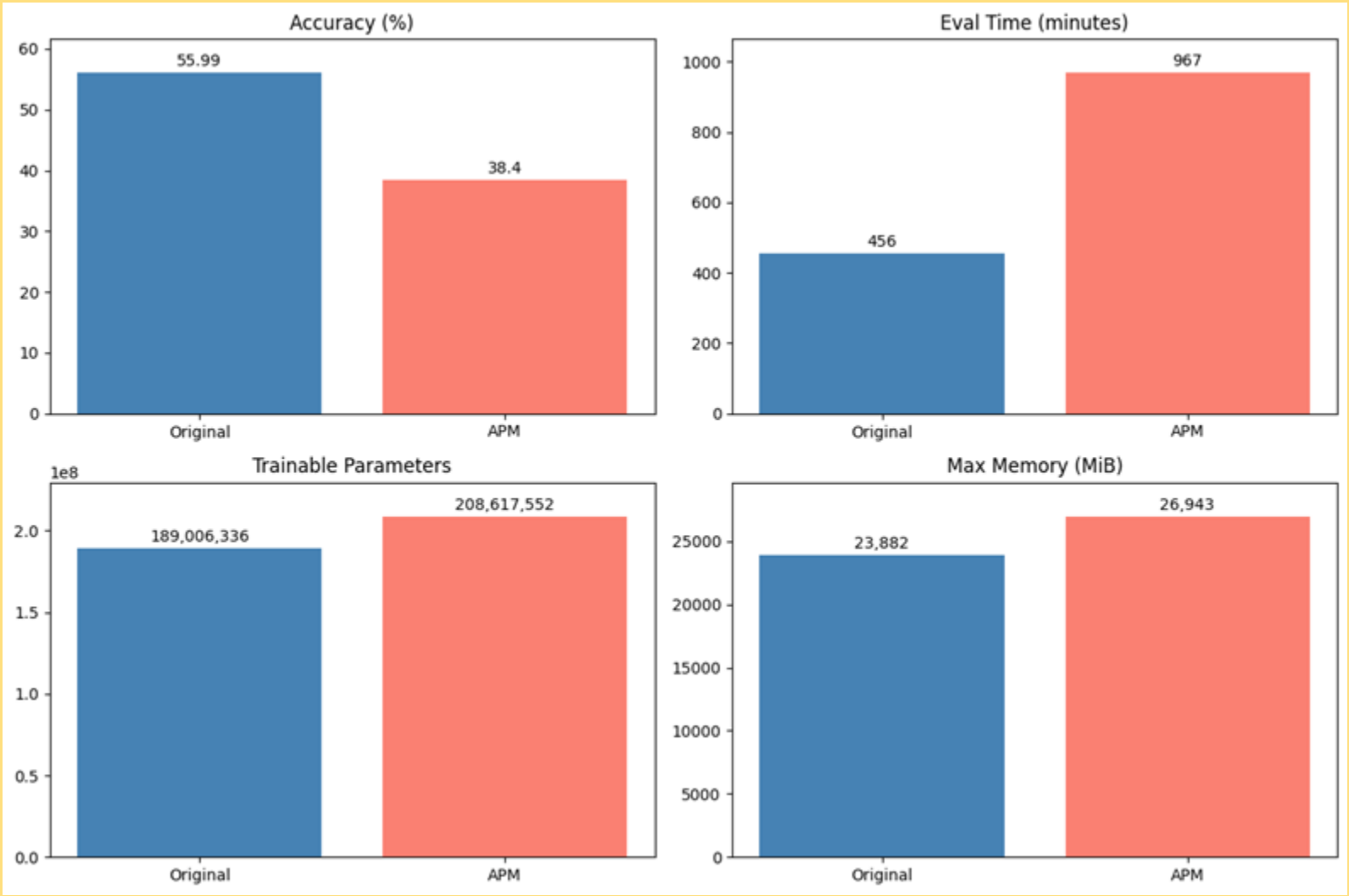
1. Trained APM cross attention, compared with original

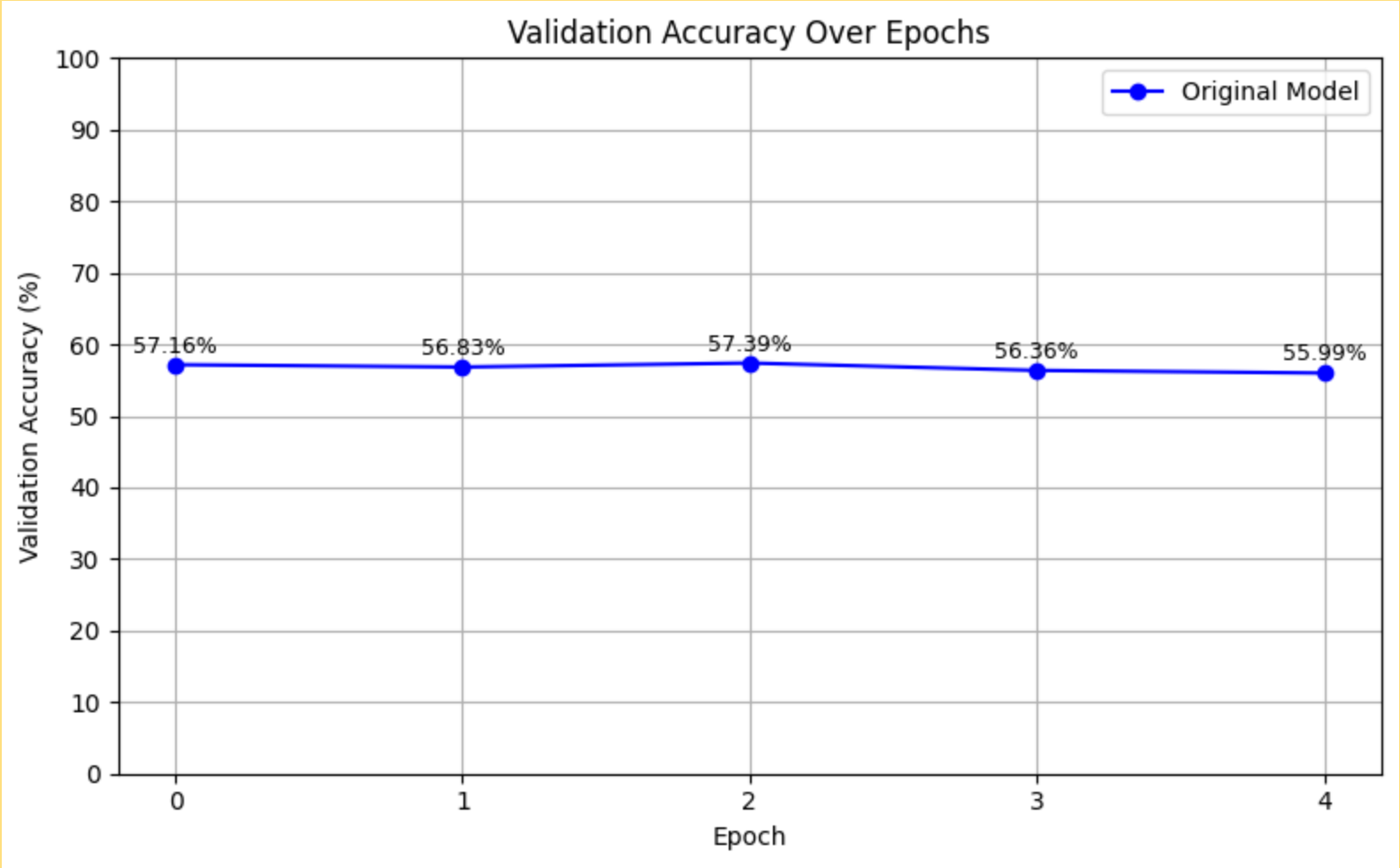
Original MA-LMM Architecture



APM MA-LMM Architecture




Accuracy (%)
55.99
38.4
Original
APM
Eval Time (minutes)
456
967
Original
APM
Trainable Parameters
1e8
189,006,336
208,617,552
Original
APM
Max Memory (MiB)
23,882
26,943
Original
APM


Validation Accuracy Over Epochs
Original Model
Validation Accuracy (%)
Epoch
57.16%
56.83%
57.39%
56.36%
55.99%
0
10
20
30
40
50
60
70
80
90
100
0
1
2
3
4

What I think is happening

1. Q-former is loading pretrained weights, original model not learning
2. May need more epochs/data for Q-former to learn how to take APM input

Next Week

1. Try small changes in architecture
2. Try higher epoch #