Week 7 Presentation

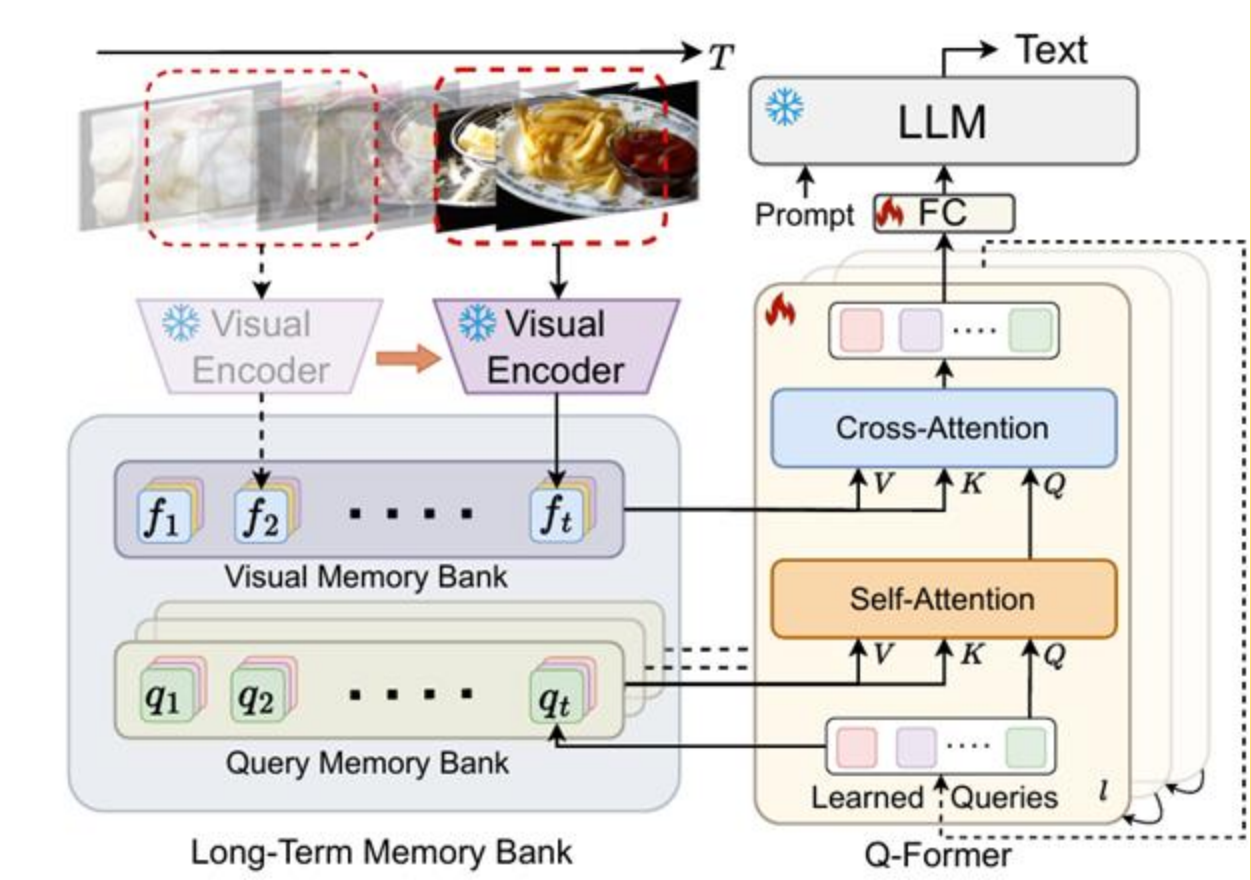
Slow-Fast Weights for Long-Term Video Understanding
-Rajat Modi, Dr. Rawat

David Gardner, July 10 2025

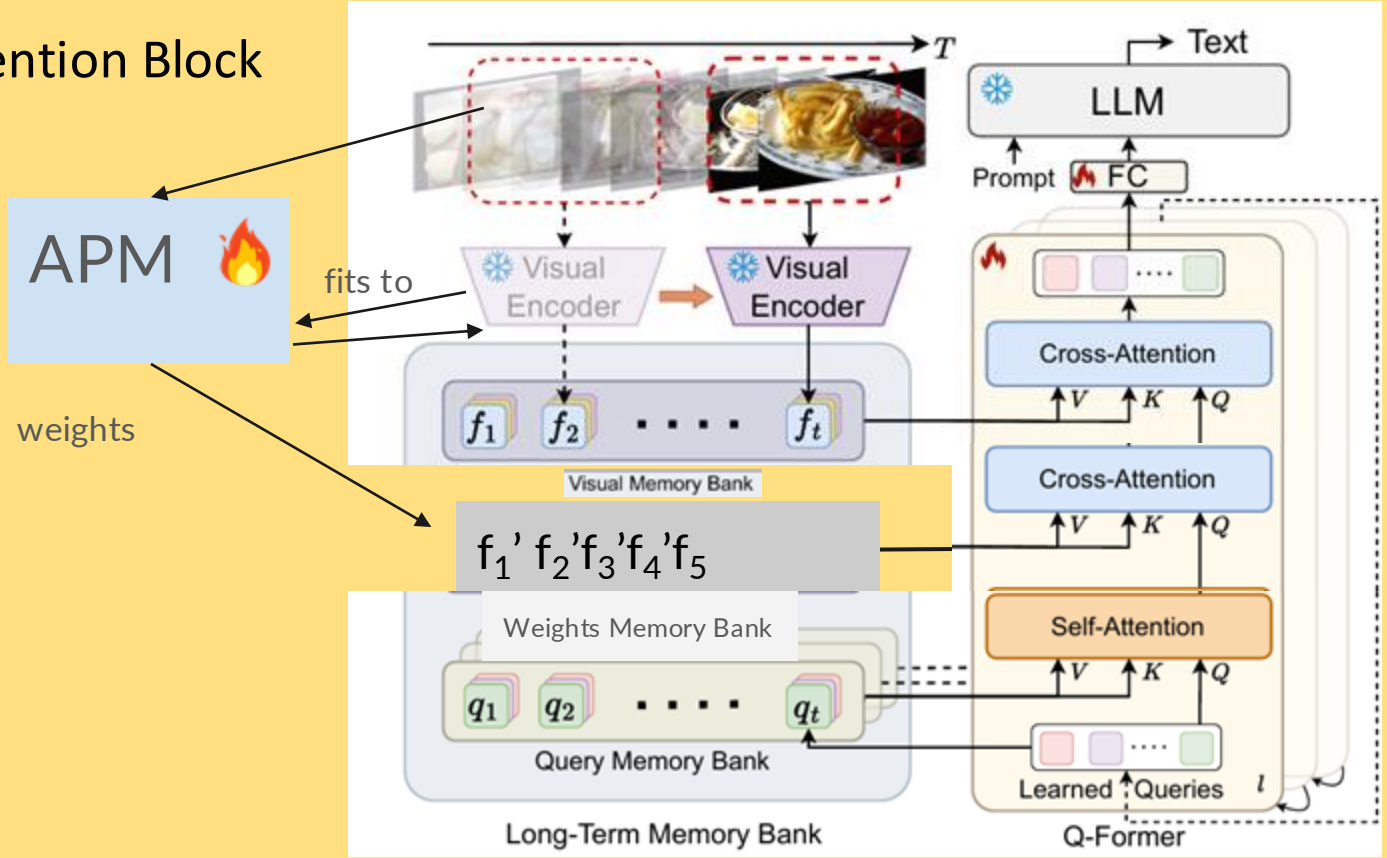
Last Week

1. Made “additive” learned memory bank, tested it
2. Testing adding a new cross attention block

Original MA LMM Architecture



New APM Cross Attention Block



“Additive” Learned Memory Bank (MSVD Q/A task)

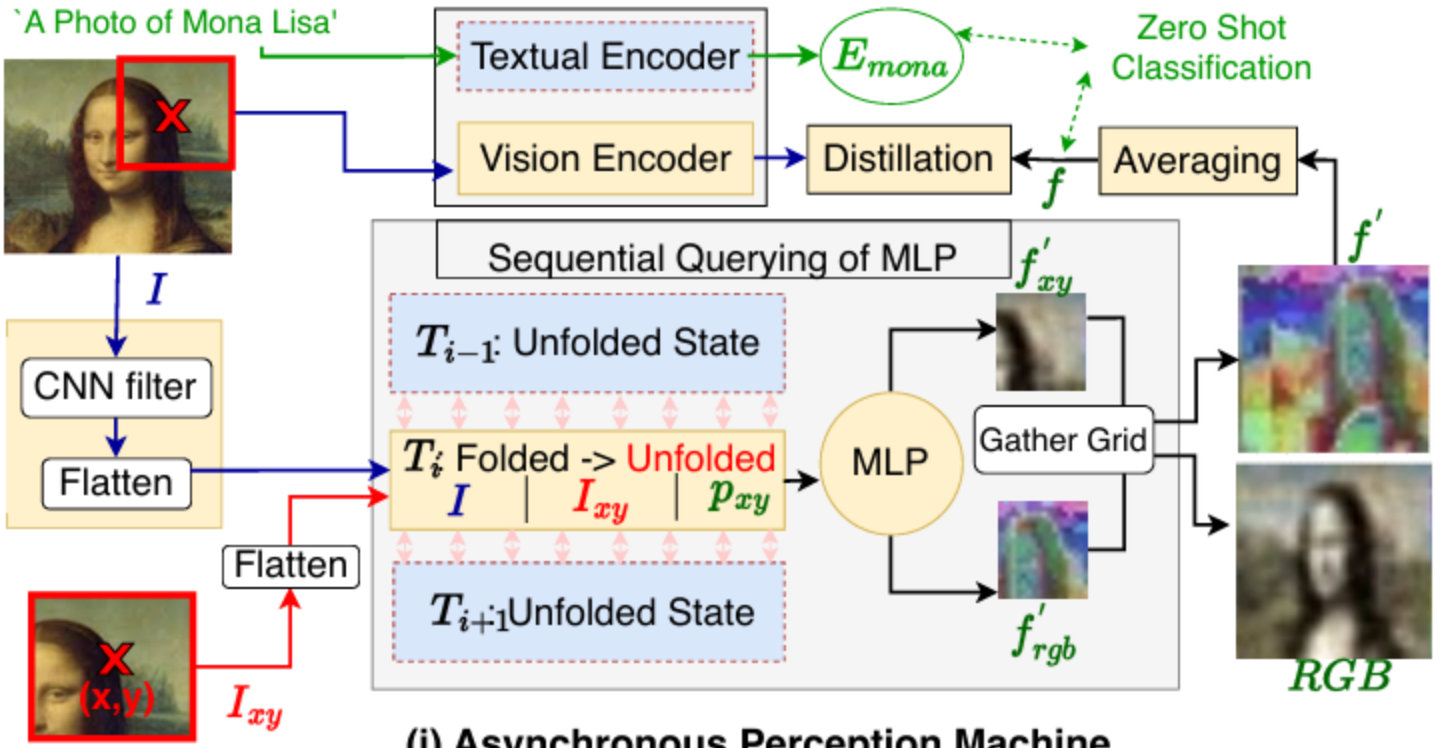


	Ground Truth	MA-LMM	MA-LMM + adding APM
What contains someone opens the lid of a corrugated cardboard?	Rifle	["gun", "box", "weapon", "machine", "assault”]	["box", "weapon", "gun", "package", "machine"]
What does a hare evade the clutches of ?	Eagle	["fox", "cat", "predator", "rabbit", "puma"]	["fox", "cat", "predator", "puma", "hound"]

2:01 to 2:08

Next Week

1. Train the new cross attention APM model
2. Make small modifications to architecture/training method
    a. Order APM/Q-former are trained in
    b. # training steps per frame for APM



(i) Asynchronous Perception Machine