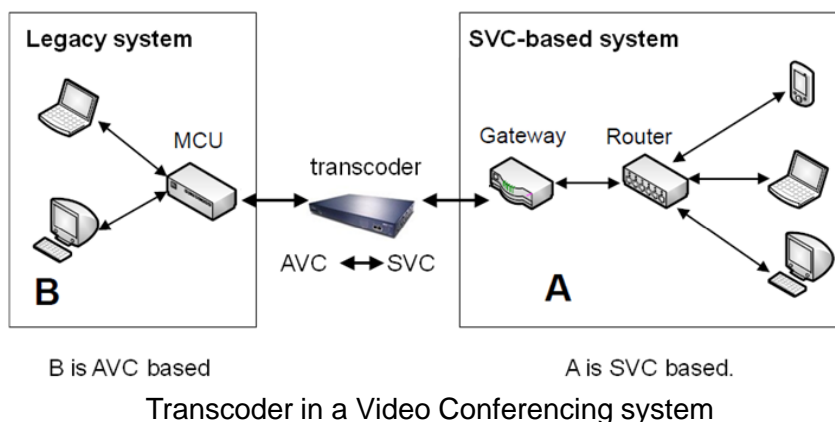


# Closed-loop based H.264/AVC to H.264/SVC transcoder in combined scalability for videoconferencing system

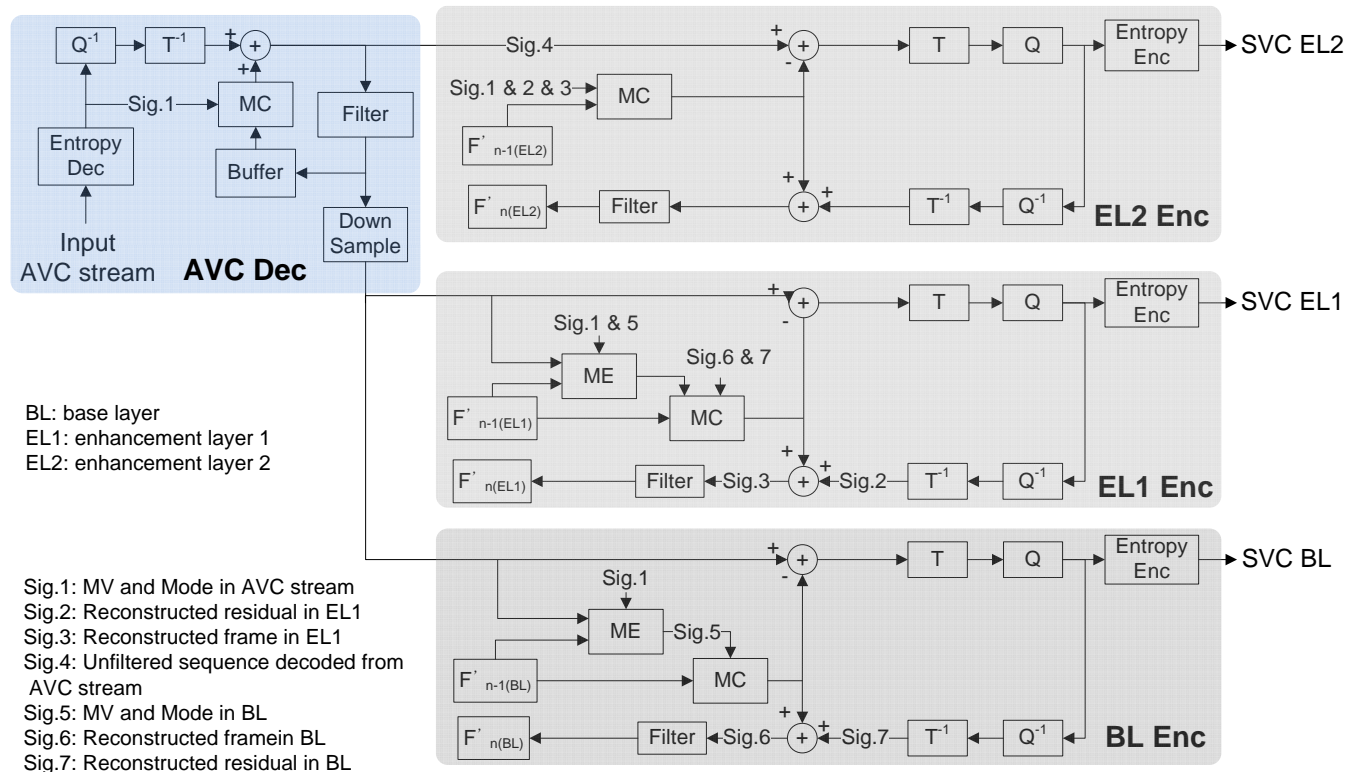
冷杰 池永研究室修士課程修了

## Research background

- ❑ H.264/SVC is the scalable extension of H.264/AVC video coding standard.
- ❑ H.264/SVC stream contains multi-layers which represent different quality, frame rate and resolution.
- ❑ AVC to SVC transcoder can solve the universal problem for some dedicate device that do not have SVC encoder.



## Proposed transcoder



## Simulation result

sequence	BL			BL+EL1			BL+EL1+EL2		
	$\Delta QP = 5$			$\Delta QP = 5$			$\Delta QP = 5$		
	BDPSNR	BDRATE	$\Delta Time$	BDPSNR	BDRATE	$\Delta Time$	BDPSNR	BDRATE	$\Delta Time$
CHEER_LEADER	-0.18 db	1.91%	-55.12%	0.01 db	-0.16 %	-84.33%	1.27 db	- 18.07 %	-90.52%
FOREMAN	-0.16 db	3.07%	-43.58%	- 0.14 db	2.68 %	-75.06%	2.87 db	-58.23 %	-86.96%
BUS	-0.11 db	1.56%	-47.77%	- 0.09 db	1.29 %	-79.30%	3.03 db	-42.02 %	-88.39%
MOBILE	-0.08 db	1.12%	-52.67%	-0.09 db	1.23 %	-79.86%	1.90 db	-27.23 %	-87.68%

