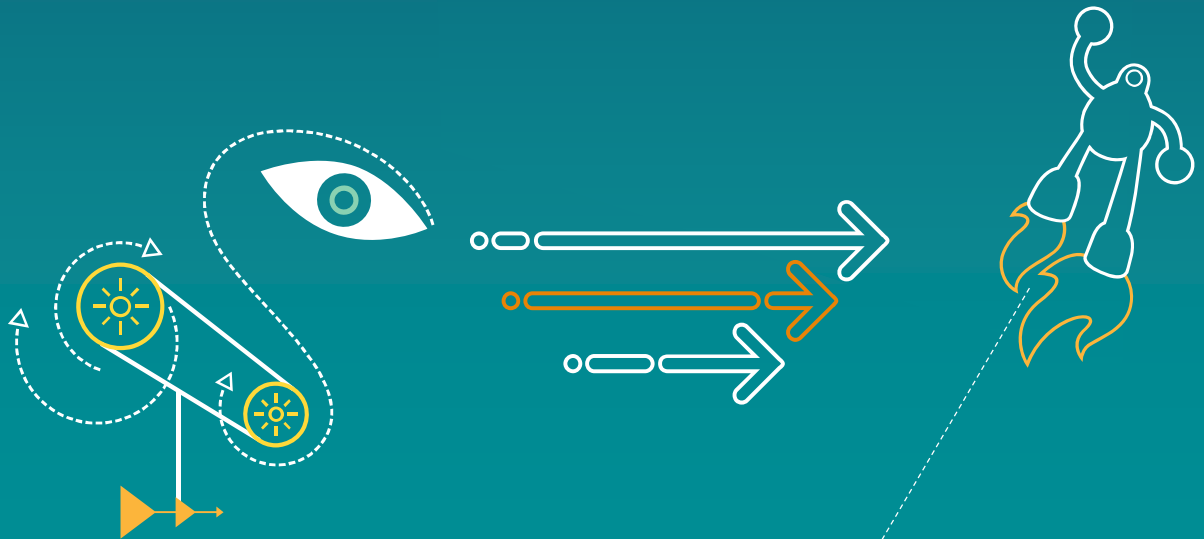


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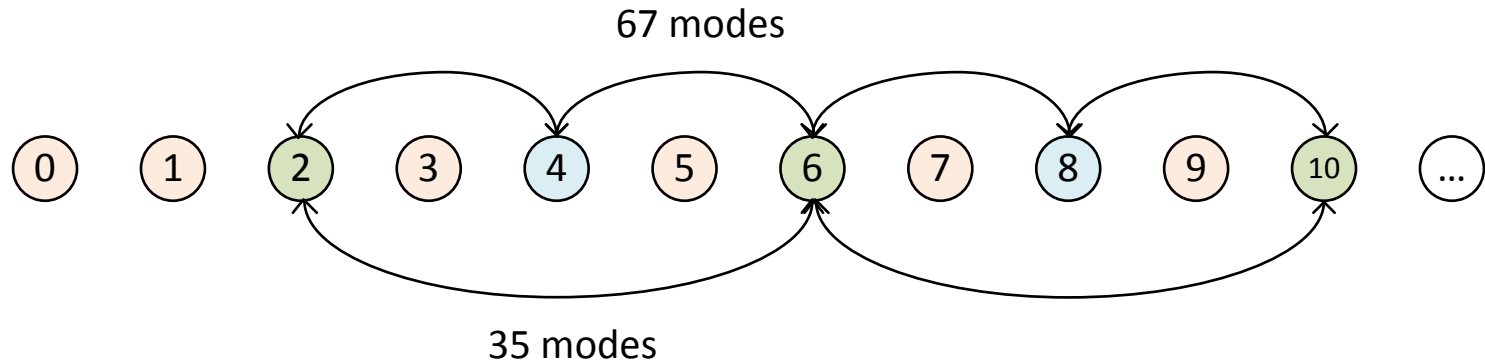
Variable number of intra modes



Adjustable number of modes

- In JEM-3.0, number of intra modes is 67.
- It is proposed to enable adjustable number of intra modes
 - 35, 67, and 131 intra modes
 - Two thresholds are signaled in SPS, indicating the largest block area that can have 35 and 67 intra modes
- The proposed method increases variety of the intra directions for larger blocks, while reduces the number of intra directions for the small blocks along with the intra mode signalling overhead

Intra modes selection



- Every second mode is used for 67 intra modes
- Every fourth mode is used for 35 intra modes
- Neighbour intra mode is rounded to second or fourth mode, when current block uses smaller intra mode range

Results

	All Intra Main 10				
	Y	U	V	EncT	DecT
Class A1	0.00%	-0.07%	0.04%	99%	98%
Class A2	-0.15%	-0.21%	-0.16%	100%	100%
Class B	-0.23%	-0.24%	-0.34%	102%	99%
Class C	-0.21%	-0.22%	-0.26%	101%	99%
Class D	-0.14%	-0.25%	-0.08%	99%	97%
Class E	-0.32%	-0.18%	-0.18%	101%	99%
Overall	-0.17%	-0.20%	-0.17%	100%	99%
Class F (optional)	-0.58%	-0.59%	-0.53%	101%	98%