		(Page No.								
02/10/2	0	Page No								
23/10/2	#	Edge Detection								
and the same of th	*	Edge dection can be done in two								
and the second		ways: Vertical and Horizontal edge								
		detection.								
· ·										
	*	Suppose we take a complicate (with many objects and crevices) mage which is								
		objects and crevices mage which is								
		graycoled.								
		of two detection methods								
-	*	so the output, would be two pies with								
		that the largest highly head on								
)-		so the output, would be two pies with only vertical edges highlighted and on the other horizontal edges.								
9		Vertical Edge Detection								
		Suppose we take a 6x6 mage,								
		as it is a grayscale image, so represented								
,		as GXGXL								
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1-	2	4 5 2 3 9 3×3								
		filter								
	1	6×6								
		The second of th								
		4x4 image								

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and the second second second second	-10 -2 2 3
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- U	The filter is cared a vertical edge
	decto detretos.
	why this filter is called verticle edge detector?
1	ede detector?
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	Liti take another example of following grayerale mage:
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	10110101010101011111111111111111111111
	3 5 2
	(assumption)
	But clearly a strong
	werkeal edge Lower thenumber
	darker the shade
	(assumption)

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1												

Page No. The filters above is just one kind of order detection filter and there are other types too! Like for vertical edge detretion: another example So bel filter Schar Filter more robust than simple In deep learning, we can put the filter relements as simple as parameters that are changed through backpropagation. Not only goe edges estaight line indge but also edges with different angles. Hence we ledue it to the Do newal now. # Blob Detection \* what is a BLOB? Blobs are bright on dark or dark on bright designe in animage. A blob is a group of connected pixels view an image that shake some common proporty (eg. grayscale value). In the mage about, the dark connected sugions are bebbs, and the goal

	Page No
	Of blob detection is to identify and mark these regions.
ر المساولة	of blob detection is to Identify and mark
ng productingly, and understiff a	these regions.
and the same of th	
*	How does it work?
mandram Mesender I (198	
	1. Thresholding: Cooners the source
Ğ	1. Thresholding: Convert the source images to several binary
	magabre thresholding the source
,	imade with thresholds. Starting at
	There thrusholds are inverserted.
	2. Grouping: In ceach Binary mage,
,	connected white pixels are
	grouped together.
	3. Merging: The centers of the binary mages
	blobs in the birrary mages
	are computed, and brown located
1	closest than a minimum distance
	are merged.
	Comments of the Contraction of the contraction
	4. Center & Radius Calculation: The conters
	hobs are computed and returned.
	mons are computed ema returned.