		Trial 1	
batch size	100		
Convolution	32/4,4/relu/2,2	32/4,4/relu/2,2	32/4,4/relu/2,2
Dense Units (1 Dense layer)	128		
actual epochs	24		
max epochs	100		
training accuracy	21.8		
testing accuracy	19.1		
		Trial 2	
batch size	1000		
Convolution	32/4,4/relu/2,2	32/4,4/relu/2,2	32/4,4/relu/2,2
Dense Units (1 Dense layer)	128		
actual epochs	8		
max epochs	100		
training accuracy	26.4		
testing accuracy	21.6		
COMMENTS	batch size modifications have a proportional difference on training time		
	batch size modifications reduced epochs, improved accuracy mildly		
		Trial 3	
batch size	100		
Convolution	32/4,4/relu/2,2	64/4,4/relu/2,2	128/4,4/relu/2,2
Dense Units (1 Dense layer)	128		
actual epochs	17		
max epochs	100		
training accuracy	34.3		
testing accuracy	26.1		
COMMENTS	increased filters had a significant and positive impact		
		Trial 4	
batch size	100		
Convolution	64/4,4/relu/2,2	128/4,4/relu/2,2	256/4,4/relu/2,2
Dense Units (1 Dense layer)	128		
actual epochs	19		
max epochs	100		
training accuracy	42.5		
testing accuracy	27.2		
COMMENTS	for some reason increasing filter size increased overfitting, will test furth		
		Trial 4	
batch size	100		
Convolution	128/4,4/relu/2,2	256/4,4/relu/2,2	512/4,4/relu/2,2
Dense Units (1 Dense layer)	128		
actual epochs	8		
max epochs	100		
training accuracy	0.1		
testing accuracy	0.1		
COMMENTS	hmmmmm, too many filters is definitely not good		
		Trial 5	
batch size	100		

Convolution	8/4,4/relu/2,2	16/4,4/relu/2,2	32/4,4/relu/2,2	
Dense Units (1 Dense layer)	128			
actual epochs	33			
max epochs	100			
training accuracy	22.7			
testing accuracy	20			
COMMENTS	seem like reducing filters ain't super helpful either, we kind of started at a sweet point. Let's add layers…			
	Trial 6			
batch size	100			
Convolution	16/4,4/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/2,2	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	16			
max epochs	100			
training accuracy	31.7			
testing accuracy	26			
COMMENTS	adding a layer MAY have helped, but we changed a lot of parameters			
	Trial 7			
batch size	100			
Convolution	16/4,4/relu/na	32/3,3/relu/na	64/3,3/relu/na	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	5			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	getting rid of pooling layers, was devastating…			
	Trial 8			
batch size	100			
Convolution	16/3,3/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/2,2	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	18			
max epochs	100			
training accuracy	36.7			
testing accuracy	29.6			
COMMENTS	reducing the kernel size in the first layer had a positive effect			
	Trial 9			
batch size	100			
Convolution	16/2,2/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/2,2	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	19			
max epochs	100			
training accuracy	38.3			
testing accuracy	29.2			
COMMENTS	reducing the kernel size in the first layer seems to have had no effect			
	Trial 10			
batch size	100			

Convolution	16/2,2/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/na	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	6			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	I got rid of the third pooling layer, and added a fifth layer and it was real			
			Trial 11	
batch size	100			
Convolution	16/2,2/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/na	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	21			
max epochs	100			
training accuracy	44.2			
testing accuracy	28.2			
COMMENTS	seems to be overfitting a little more than trial 9 for some reason			
			Trial 12 (copy of trial 6)	
batch size	100			
Convolution	16/4,4/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/2,2	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	21			
max epochs	100			
training accuracy	35.1			
testing accuracy	27.5			
COMMENTS	results are similar to before			
			Trial 13	
batch size	100			
Convolution	16/4,4/relu/na	32/3,3/relu/na	64/3,3/relu/na	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	8			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	deleting all max pooling layers, is devastating			
			Trial 14	
batch size	100			
Convolution	16/4,4/relu/na	32/3,3/relu/na	64/3,3/relu/na	128/2,2/relu/na
Dense Units (1 Dense layer)	128			
actual epochs	5			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	adding a layer didn't really help…			
			Trial 15	
batch size	100			
Convolution	16/2,2/relu/2,2	32/3,3/relu/2,2	64/3,3/relu/2,2	128/2,2/relu/na
Dense Units (1 Dense layer)	128			

actual epochs	20			
max epochs	100			
training accuracy	38			
testing accuracy	29.6			
COMMENTS	brought back all three layers of max pooling layer			
			Trial 15	
batch size	100			
Convolution	16/2,2/relu/2,2	32/2,2/relu/2,2	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	26			
max epochs	100			
training accuracy	39.8			
testing accuracy	30.4			
COMMENTS	added max pooling layer at level four and reduced kernel size in layer 2 a			
			Trial 15	
batch size	100			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	22			
max epochs	100			
training accuracy	43.7			
testing accuracy	31.9			
COMMENTS	added fifth layer, made layer 2 kernel 1,1 and removed it's max pooling			
			Trial 16	
batch size	100			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	21			
max epochs	100			
training accuracy	49.9			
testing accuracy	33			
COMMENTS	more filters in the final layer, is slightly positive			
			Trial 17	
batch size	100			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	20			
max epochs	100			
training accuracy	51.4			
testing accuracy	32.5			
COMMENTS	more filters in the final layer, had no effect			
			Trial 18	
batch size	300			
Convolution	32/2,2/relu/2,2	64/1,1/relu/na	128/2,2/relu/2,2	256/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	12			
max epochs	100			

training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	double filters at each non-final layer and triple batch size was not good			
		Trial 19 (copy Trial 16)		
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	128			
actual epochs	19			
max epochs	100			
training accuracy	44.2			
testing accuracy	32.6			
COMMENTS	changed batch size, no serious effect (may have reduced overfitting a lit			
		Trial 20		
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	80			
actual epochs	5			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	reduced dense layers, doesn't seem to caputre the pattern anymore			
		Trial 21		
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	110			
actual epochs	24			
max epochs	100			
training accuracy	50			
testing accuracy	32.7			
COMMENTS	midde ground of dense layers, doesn't seem to help with overfitting			
		Trial 22		
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	95			
actual epochs	6			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	reduced dense layers, doesn't seem to caputre the pattern anymore			
		Trial 23		
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Units (1 Dense layer)	103			
actual epochs	25			
max epochs	100			
training accuracy	49.4			
testing accuracy	33.4			

COMMENTS	midde ground of dense layers, doesn't seem to help with overfitting			
			Trial 24	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	103/80/60			
actual epochs	23			
max epochs	100			
training accuracy	40.5			
testing accuracy	27.6			
COMMENTS	added two more dense layers			
			Trial 24	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	50/80/60			
actual epochs	18			
max epochs	100			
training accuracy	39			
testing accuracy	26.2			
COMMENTS	reduced first layer units, no effect			
			Trial 25	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	25/80/60			
actual epochs	9			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	reduced first layer units, can't find a pattern			
			Trial 26	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/80/40			
actual epochs	27			
max epochs	100			
training accuracy	33.5			
testing accuracy	22.5			
COMMENTS	moderated first and last layer, accuracy reduced, overfitting mostly unaf			
			Trial 27	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/60/40			
actual epochs	21			
max epochs	100			
training accuracy	33.2			
testing accuracy	24.5			
COMMENTS	reduced hidden units in middle layer, no effect			
			Trial 28	

batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	30/40/30			
actual epochs	10			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	dropped a ton on units, lost the pattern			
			Trial 29	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/50/40			
actual epochs	18			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	increased units in all layers, but not enough			
			Trial 30 (copy Trial 27)	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/60/40			
actual epochs	18			
max epochs	100			
training accuracy	24.3			
testing accuracy	17.3			
COMMENTS	flukey...			
			Trial 31	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/80/40			
actual epochs	23			
max epochs	100			
training accuracy	37.1			
testing accuracy	25.9			
COMMENTS	back to roughly Trial 24…			
			Trial 31	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	40/80/40			
actual epochs	19			
max epochs	100			
training accuracy	20			
testing accuracy	14.2			
COMMENTS	increased the filter size of the last layer (note that we have more nodes)			
			Trial 32	
batch size	300			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2

Dense Layers	60/120/60			
actual epochs	18			
max epochs	100			
training accuracy	37.2			
testing accuracy	26.5			
COMMENTS	increased dense layer node number, improved accuracy markedly			
			Trial 33	
batch size	900			
Convolution	16/2,2/relu/2,2	32/1,1/relu/na	64/2,2/relu/2,2	128/2,2/relu/2,2
Dense Layers	60/120/60			
actual epochs	30			
max epochs	100			
training accuracy	32.5			
testing accuracy	22			
COMMENTS	increased batch size, training was faster, decreased accuracy somehow			
			Trial 34	
batch size	900			
Convolution	16/2,2/relu/2,2	64/1,1/relu/na	124/2,2/relu/2,2	256/2,2/relu/2,2
Dense Layers	60/120/60			
actual epochs	22			
max epochs	100			
training accuracy	34.5			
testing accuracy	23.4			
COMMENTS	doubled filters for a bunch of layers, minimal impact (maybe needs more classifying nodes)			
			Trial 35	
batch size	900			
Convolution	16/2,2/relu/2,2	64/1,1/relu/na	124/2,2/relu/2,2	256/2,2/relu/2,2
Dense Layers	80/140/80			
actual epochs	23			
max epochs	100			
training accuracy	43.6			
testing accuracy	28.9			
COMMENTS	positive impact, but increased overfitting			
			Trial 36	
batch size	900			
Convolution	16/2,2/relu/2,2	64/1,1/relu/na	124/2,2/relu/2,2	256/2,2/relu/2,2
Dense Layers	80/140/80			
actual epochs	20			
max epochs	100			
training accuracy	0.1			
testing accuracy	0.1			
COMMENTS	couldn't capture pattern			
			Trial 37	
batch size	900			
Convolution	16/2,2/relu/2,2	64/1,1/relu/na	124/2,2/relu/2,2	256/2,2/relu/2,2

Dense Layers	300/140/300			
actual epochs	21			
max epochs	100			
training accuracy	48			
testing accuracy	30			
COMMENTS	increased number of classifying nodes, accuracy hasn't improved much from Trial 35. Overfitting has increased.			
				Trial 38
batch size	900			
Convolution	32/2,2/relu/2,2	124/1,1/relu/na	256/2,2/relu/2,2	512/2,2/relu/2,2
Dense Layers	300/140/300			
actual epochs	16			
max epochs	100			
training accuracy	60			
testing accuracy	36			
COMMENTS	increased filters in all layers			
				Trial 39
batch size	900			
Convolution	32/2,2/relu/2,2	124/1,1/relu/na	256/2,2/relu/2,2	512/2,2/relu/2,2
Dense Layers	300/140/300			
actual epochs	17			
max epochs	100			
training accuracy	63.3			
testing accuracy	35.3			
COMMENTS	increased filters in last layer, but no effect			
				Trial 40
batch size	900			
Convolution	32/2,2/relu/2,2	124/1,1/relu/na	256/2,2/relu/2,2	512/2,2/relu/2,2
Dense Layers	400/140/300			
actual epochs	17			
max epochs	100			
training accuracy	70			
testing accuracy	36			
COMMENTS	increased nodes in first classifying layer, worsened overfitting			
				Trial 41
batch size	2700			
Convolution	128/2,2/relu/2,2	256/2,2/relu/na	512/2,2/relu/2,2	1024/2,2/relu/2,2
Dense Layers	400/140/300			
actual epochs	24			
max epochs	100			
training accuracy	49.6			
testing accuracy	33.5			
COMMENTS	tripled batch size, increased kernel size in layer 2 and removed last max pooling layer, reduced overfitting considerably for some reason			
				Trial 42
batch size	4000			

Convolution	128/2,2/relu/2,2	256/2,2/relu/na	512/2,2/relu/2,2	1024/2,2/relu/2,2
Dense Layers	400/140/300			
actual epochs	9			
max epochs	100			
training accuracy	58			
testing accuracy	34			
COMMENTS	increased batch size, didn't really seem much faster			
		Trial 43 USED DATA AUGMENTATION		
batch size	4000			
Convolution	128/2,2/relu/2,2	256/2,2/relu/na	512/2,2/relu/2,2	1024/2,2/relu/2,2
Dense Layers	400/140/300			
actual epochs	32			
max epochs	100			
training accuracy	54.1			
testing accuracy	33.1			
COMMENTS	modest reduction in overfitting, but slowed training considerably - not really worth the hastle…			
		Trial 44 USED CHAT GPT TO SUGGEST AN ARCHITECTURE, which uses pa		
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	512/100			
actual epochs	12			
max epochs	100			
training accuracy	54.3			
testing accuracy	40.3			
COMMENTS	increased batch size, didn't really seem much faster			
			Trial 45 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/100	300/200		
actual epochs	12	20	Trial 53	
max epochs	100			
training accuracy	53.3	51.1		
testing accuracy	35.7	35.2		
COMMENTS	reduced first layer, reduced accuracy			
			Trial 46 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	400/200			
actual epochs	17			
max epochs	100			
training accuracy	51.3			
testing accuracy	36.2			
COMMENTS	modified fc layers, overfitting reduced			
			Trial 47 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2

Dense Layers	350/250			
actual epochs	23			
max epochs	100			
training accuracy	60.2			
testing accuracy	37.2			
COMMENTS	modified fc layers, overfitting increased			
			Trial 48 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	200/100/50			
actual epochs	23			
max epochs	100			
training accuracy	28.5			
testing accuracy	22.9			
COMMENTS	modified fc layers, overfitting increased			
			Trial 49 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	450/200			
actual epochs	22			
max epochs	100			
training accuracy	59.2			
testing accuracy	37.2			
COMMENTS	overfitting increased			
			Trial 50 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	24			
max epochs	100			
training accuracy	57.4			
testing accuracy	37.3			
COMMENTS	overfitting decreased			
			Trial 51 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	250/200			
actual epochs	27			
max epochs	100			
training accuracy	55.3			
testing accuracy	35.5			
COMMENTS	accuracy decreased			
			Trial 52 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200/50			
actual epochs	44			

max epochs	100			
training accuracy	40.2			
testing accuracy	28.6			
COMMENTS	oh boiii			
			Trial 53 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/100			
actual epochs	19			
max epochs	100			
training accuracy	45.8			
testing accuracy	33			
COMMENTS	reduced overfitting, minimal impact to accuracy			
			Trial 54 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/50			
actual epochs	23			
max epochs	100			
training accuracy	41.3			
testing accuracy	30.1			
COMMENTS	reduced overfitting, some impact to accuracy			
			Trial 55 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/300			
actual epochs	26			
max epochs	100			
training accuracy	62.3			
testing accuracy	37.9			
COMMENTS				
			Trial 56 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	800/200			
actual epochs	17			
max epochs	100			
training accuracy	58.5			
testing accuracy	37.9			
COMMENTS	minor reduction in overfitting, but no change in accuracy			
			Trial 57 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	250/200			
actual epochs	25			
max epochs	100			
training accuracy	56.2			

testing accuracy	36.3			
COMMENTS	reduce accuracy			
			Trial 58 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/4,4/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	22			
max epochs	100			
training accuracy	55.9			
testing accuracy	36.8			
COMMENTS	decent…			
			Trial 59 (padding)	
batch size	128			
Convolution	32/4,4/relu/na	32/4,4/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	24			
max epochs	100			
training accuracy	52.9			
testing accuracy	34.8			
COMMENTS	after increasing kernel size, REDUCED ACCURACY...			
			Trial 60 (padding)	
batch size	128			
Convolution	32/3,3/relu/na	32/2,2/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	27			
max epochs	100			
training accuracy	56.8			
testing accuracy	38.2			
COMMENTS	after decreasing kernel size, improved accuracy			
			Trial 61 (padding)	
batch size	128			
Convolution	32/4,4/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	24			
max epochs	100			
training accuracy	48.9			
testing accuracy	34.7			
COMMENTS	decrescendo kernel size, reduced accuracy a lot - but overfitting decreased more			
			Trial 62 (padding)	
batch size	128			
Convolution	32/2,2/relu/na	32/2,2/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	17			
max epochs	100			
training accuracy	50			

testing accuracy	33.1			
COMMENTS	crescendo kernel size, accuracy decreased			
		Trial 63 (padding)		
batch size	128			
Convolution	32/4,4/relu/na	32/4,4/relu/2,2	64/4,4/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	27			
max epochs	100			
training accuracy	50.7			
testing accuracy	33.5			
COMMENTS	decrescendo kernel size, but less drop did not see much improvement			
		Trial 64 (padding)		
batch size	128			
Convolution	32/5,5/relu/na	32/4,4/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	24			
max epochs	100			
training accuracy	45.2			
testing accuracy	33.3			
COMMENTS	decrescendo kernel size & stretched kernel range marked - decrease in overfitting			
		Trial 65 (padding)		
batch size	128			
Convolution	32/6,6/relu/na	32/5,5/relu/2,2	64/4,4/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	22			
max epochs	100			
training accuracy	39			
testing accuracy	30			
COMMENTS	decrescendo kernel size & stretched kernel range - decrease in overfitting again, but accompanied by reduced accuracy			
		Trial 66 (padding)		
batch size	128			
Convolution	32/6,6/relu/na	32/5,5/relu/na	32/5,5/relu/2,2	64/4,4/relu/na
Dense Layers	300/200			
actual epochs	22			
max epochs	100			
training accuracy	36.4			
testing accuracy	27.8			
COMMENTS	added another layer, but decreased accuracy a lot			
		Trial 67 (padding)		
batch size	128			
Convolution	32/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	64/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	16			
max epochs	100			
training accuracy	44.9			

testing accuracy	34.3			
COMMENTS	not as good as the original chat-gpt			
			Trial 68 (padding)	
batch size	128			
Convolution	64/3,3/relu/na	64/3,3/relu/2,2	128/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	300/200			
actual epochs	22			
max epochs	100			
training accuracy	52			
testing accuracy	34.5			
COMMENTS	doubled the filters			
			Trial 69 (padding)	
batch size	128			
Convolution	64/3,3/relu/na	64/3,3/relu/2,2	128/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/200			
actual epochs	21			
max epochs	100			
training accuracy	58.1			
testing accuracy	38			
COMMENTS	increased first fc layer			
			Trial 70 (padding)	
batch size	128			
Convolution	64/3,3/relu/na	64/3,3/relu/2,2	128/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	15			
max epochs	100			
training accuracy	63.4			
testing accuracy	40			
COMMENTS	increased last fc layer			
			Trial 71 (padding)	
batch size	128			
Convolution	64/4,4/relu/na	64/3,3/relu/2,2	128/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	16			
max epochs	100			
training accuracy	60.6			
testing accuracy	37.5			
COMMENTS	decreased accuracy			
			Trial 72 (padding)	
batch size	128			
Convolution	64/3,3/relu/na	64/3,3/relu/2,2	128/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	18			
max epochs	100			
training accuracy	63.9			
testing accuracy	38.4			
COMMENTS	last layer kernel size decreased - increased overfitting			

		Trial 73 (padding)		
batch size	128			
Convolution	16/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	18			
max epochs	100			
training accuracy	64.8			
testing accuracy	37.6			
COMMENTS	crecsendo of filter size			
		Trial 74 (padding)		
batch size	128			
Convolution	16/3,3/relu/na	32/3,3/relu/2,2	64/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	20			
max epochs	100			
training accuracy	69.9			
testing accuracy	38.2			
COMMENTS	reduce last kernel size			
		Trial 75 (padding)		
batch size	128			
Convolution	16/3,3/relu/na	32/3,3/relu/2,2	64/4,4/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	18			
max epochs	100			
training accuracy	62.7			
testing accuracy	36.5			
COMMENTS				
		Trial 76 (padding)		
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	512/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	10			
max epochs	100			
training accuracy	84			
testing accuracy	39.7			
COMMENTS	overfitting wayyyy too much			
		Trial 76 (padding)		
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	24			
max epochs	100			
training accuracy	58.4			
testing accuracy	38.9			
COMMENTS	redcued overfitting but didn't improve accuracy			
		Trial 77 (padding)		
batch size	100			

Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy				
testing accuracy				
COMMENTS				
		Trial 78 switched to CIFAR 10		
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy	94.4			
testing accuracy	74.4			
COMMENTS	switched to CIFAR10			
			Trial 79	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy	65.2			
testing accuracy	51			
COMMENTS	(drop out layer values went from 0.5 to 0.9)			
			Trial 80	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy	93.9			
testing accuracy	74.7			
COMMENTS	(drop out layer values went from 0.9 to 0.7)			
			Trial 81	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy	91.3			
testing accuracy	72.3			
COMMENTS	(drop out layer values went from 0.7 to 0.8)			
			Trial 81	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	256/3,3/relu/2,2
Dense Layers	512/500			

actual epochs	27			
max epochs	100			
training accuracy	95.9			
testing accuracy	80.1			
COMMENTS	normalized images using min max scaling			
			Trial 82	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	64/3,3/relu/na	128/3,3/relu/2,2
Dense Layers	512/500			
actual epochs				
max epochs	100			
training accuracy	94.7			
testing accuracy	78			
COMMENTS	reduced filter size in larger layers			
			Trial 83	
batch size	100			
Convolution	64/3,3/relu/na	128/3,3/relu/2,2	256/3,3/relu/na	512/3,3/relu/2,2
Dense Layers	512/500			
actual epochs	27			
max epochs	100			
training accuracy	95.9			
testing accuracy	80.1			
COMMENTS	normalized images using min max scaling			

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256/2,2/relu/na

ly bad

and 3 to accommodate

128/2,2/relu/2,2

layer (only get more filters)

256/2,2/relu/2,2

512/2,2/relu/2,2

512/2,2/relu/2,2

256/2,2/relu/2,2

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256/2,2/relu/2,2

256/2,2/relu/2,2

512/2,2/relu/2,2

, did not help

512/2,2/relu/2,2

512/2,2/relu/2,2

512/2,2/relu/2,2

512/2,2/relu/2,2

1024/2,2/relu/2,2

1024/2,2/relu/2,2

1024/2,2/relu/2,2

2048/2,2/relu/2,2

2048/2,2/relu/2,2

2048/2,2/relu/na

2048/2,2/relu/na

2048/2,2/relu/na

adding

128/3,3/relu/na 128/3,3/relu/2,2

128/3,3/relu/na 128/3,3/relu/2,2

128/3,3/relu/na 128/3,3/relu/2,2

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128/3,3/relu/na 128/2,2/relu/2,2

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64/3,3/relu/2,2 128/3,3/relu/na 128/2,2/relu/2,2

128/3,3/relu/na 128/3,3/relu/2,2

256/3,3/relu/na 256/3,3/relu/2,2

256/3,3/relu/na 256/3,3/relu/2,2

256/3,3/relu/na 256/3,3/relu/2,2

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256/3,3/relu/na 512/3,3/relu/2,2

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256/3,3/relu/na 512/3,3/relu/2,2

1024/3,3/relu/na 2048/3,3/relu/2,2

64/3,3/relu/na 32/3,3/relu/2,2

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1024/3,3/relu/na 32/3,3/relu/2,2