

$$|U_0$$

$k_l$

$$5 * 5 * 28 * 28 * 6 + 6 * 28 * 28 = 122,304$$

---

$$5 * 5 * 6 + 6 = 156$$

$$6 * 28 * 28 + 6 * 14 * 14 = 5,880$$

---

$$6 + 6 = 156$$

$$= 6 * 5 * 5 * 10 * 10 * 10 + 10 * 10 * 16 = 151,600$$

---

$$= 5 * 5 * 3 * 6 + 5 * 5 * 4 * 9 + 5 * 5 * 6 * 1 + 16 = 1,516$$

---



$$= 6 * 5 * 5 * 10 * 10 * 16 + 10 * 10 * 16 = 241,600$$

---

$$= 5 * 5 * 16 * 6 + 16 = 2416$$

$$= 16 * 10 * 10 + 16 * 5 * 5 = 2,000$$

$$= 16 + 16 = 32$$

$$= 16 * 5 * 5 * 120 + 120 = 48,120$$

$$= 120 * 84 + 84 = 10,164$$

$$\underline{84 * 10 = 840}$$

$$K_{xy}$$



$\underline{v}^b$

$$\underline{v^m}$$

$\mathbb{L}_c$

[\*http : //www.nada.kth.se/cvap/actions/\*](http://www.nada.kth.se/cvap/actions/)

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<http://crcv.ucf.edu/data/UCFsportsAction.php>

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[http : //www.di.ens.fr/ laptev/actions/hollywood2/](http://www.di.ens.fr/~laptev/actions/hollywood2/)

---

$$f(x) = \max(0, x)$$

1.2



1.4%

$$b_{x,y}^i = a_{x,y}^i / \left( k + \alpha \sum_{j=\max(0,i-n/2)}^{\min(N-1,i+n/2)} (a_{x,y}^j)^2 \right)^\beta$$

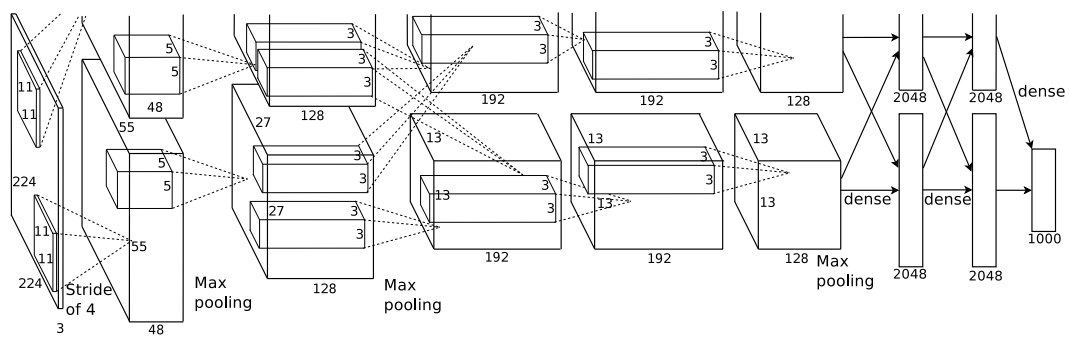
$$|k = 2, n = 5, \alpha = 10^{-4}$$

$$\beta = 0.75$$

0.3

0.4%

$3\Pi 3$





0.1

50%

$$\lfloor 2^N$$

20%



22.7%

19.7%

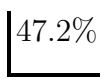
18.5%

16.6%




15.6%

47.2%



45.7%

48.6%



42.4%

31.05%

29.62%

$> 13.000$



97.3%