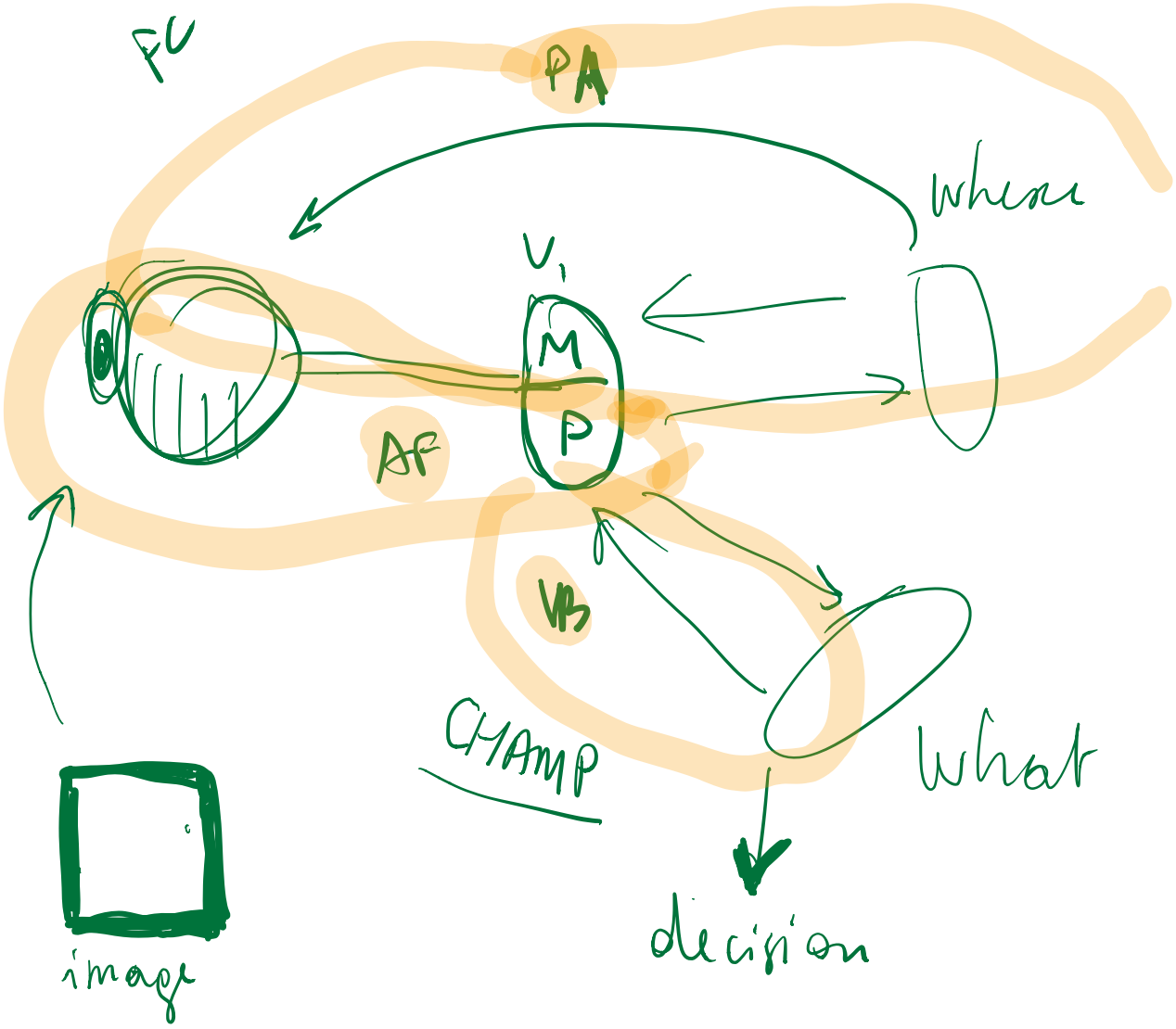
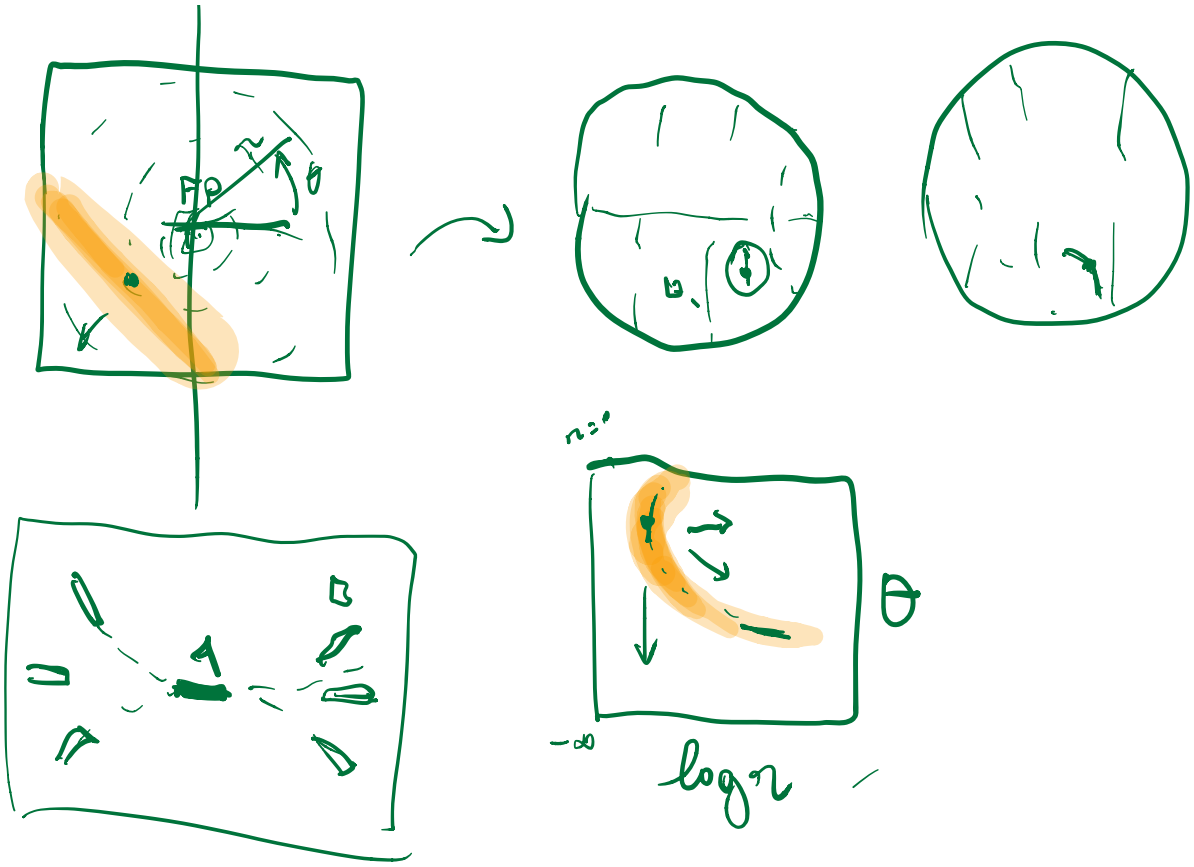
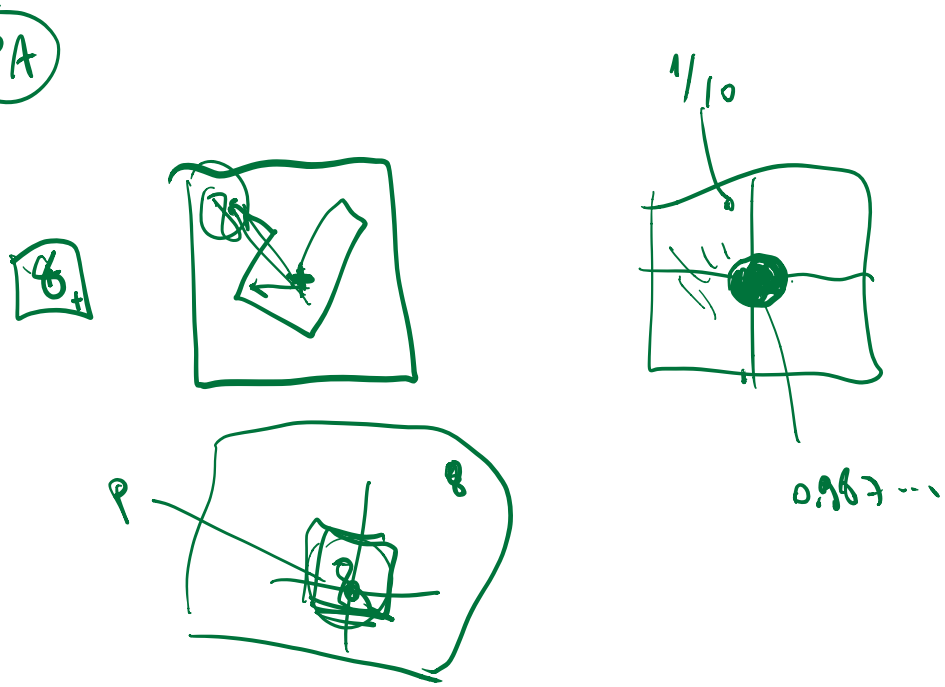
Toto





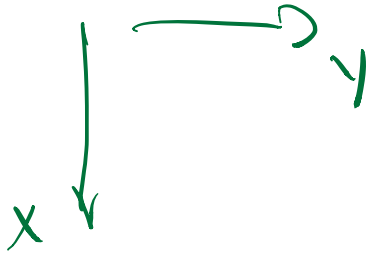
PA

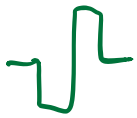


YOLO

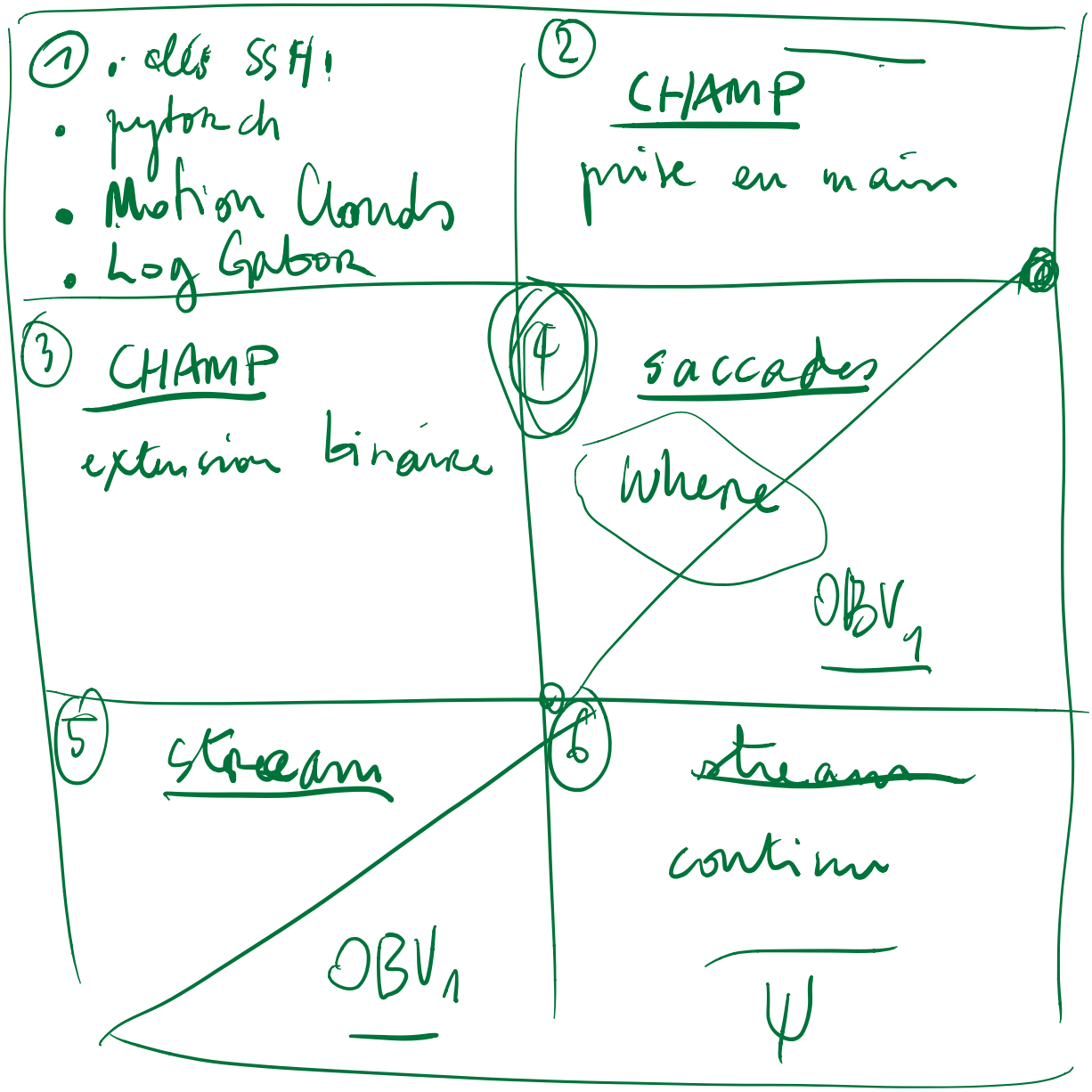
$$MC = \sum_{i=0}^{\infty} a_i \left(\varphi_i * \delta_{x_i, y_i} \right)$$

$$\varphi_i(0 - x_i, 0 - y_i)$$



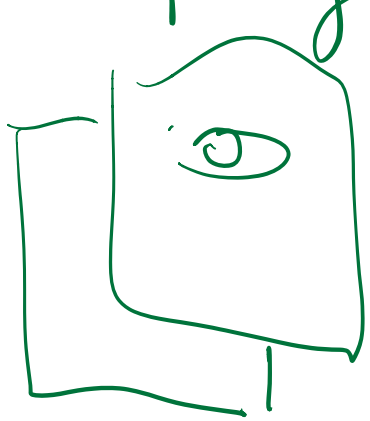


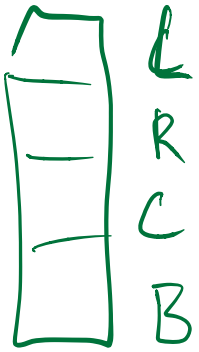
Planning ?



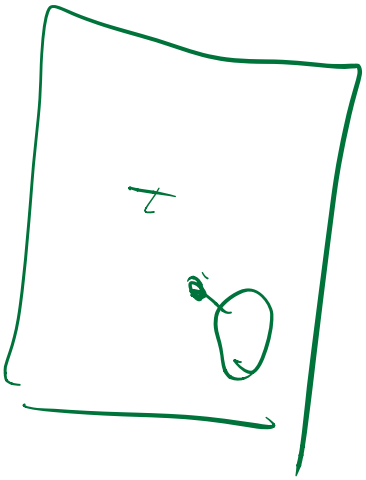
pip install git+https://github.---

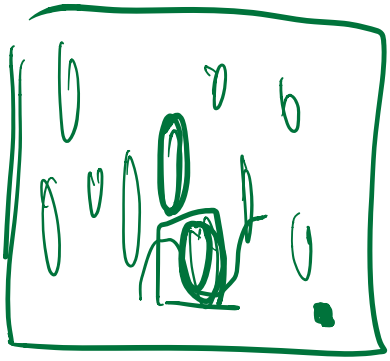
Le Cheap Eye Tracker





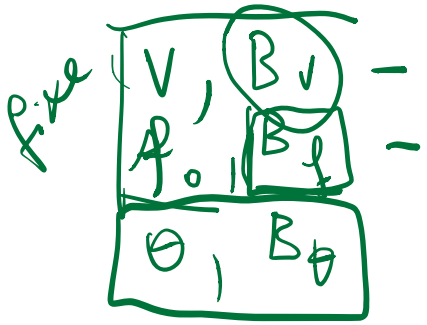
Motion Clouds

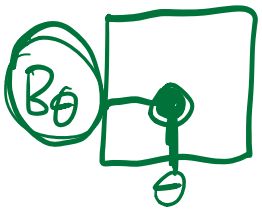




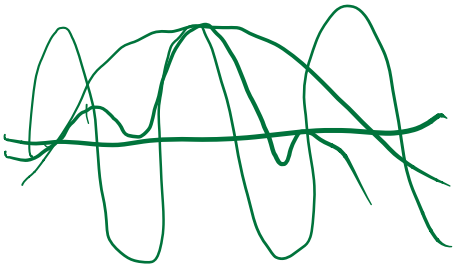
cycle / pixel

$\frac{1}{20}$





θ



N1

L — installer MC + générer B_θ / θ
— Log Gabor sur base
— copier coller depuis

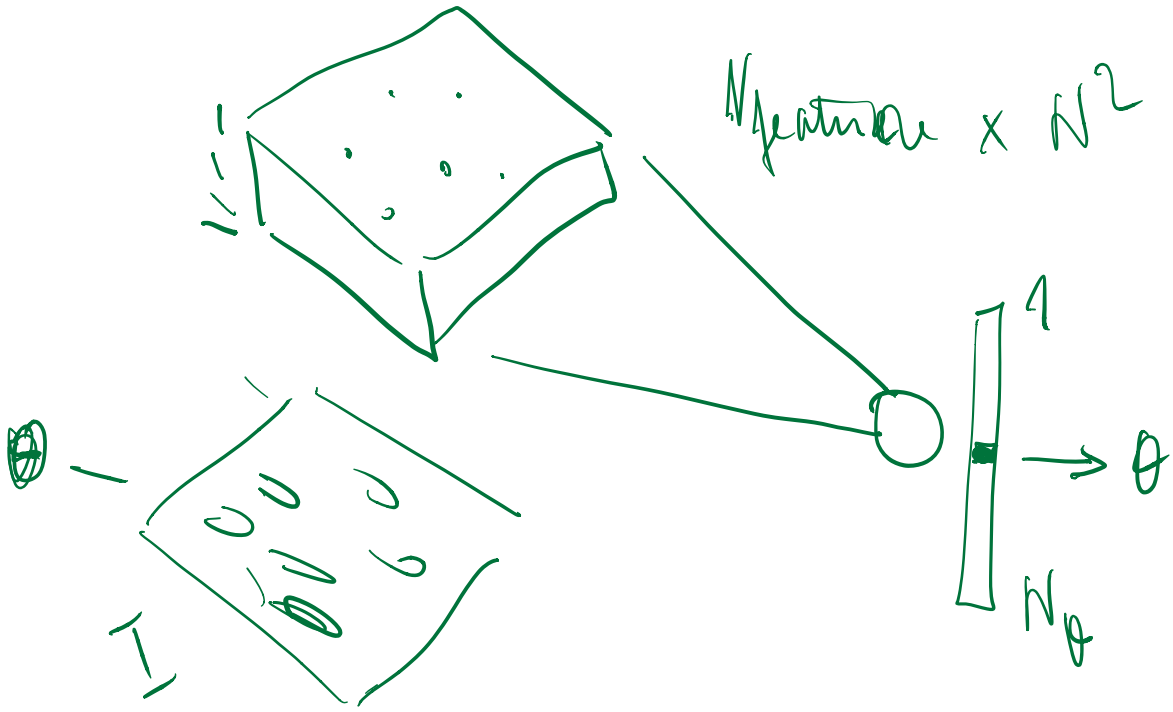
M
- sachant θ, B_θ apprendre le réseau de classif
- avec les pixels

M
apprendre sur les coeffs LogGabor
- en connaissant les paramètres f_0 B_f & B_θ

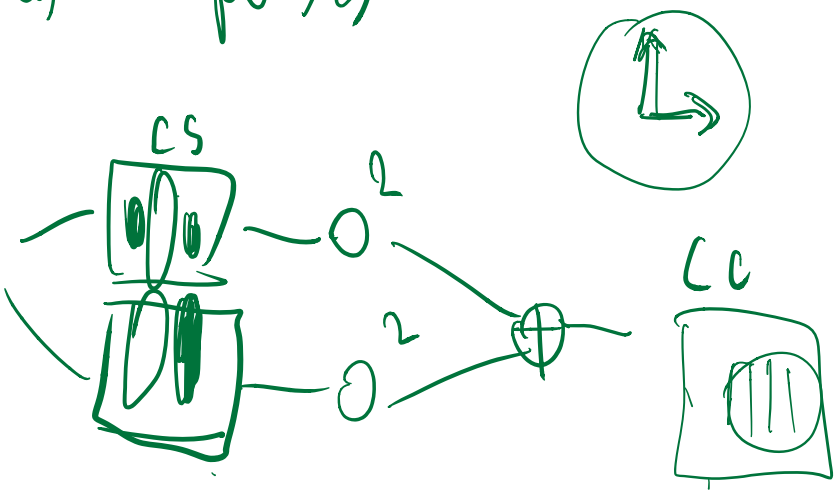
J
apprendre sans connaître B_f

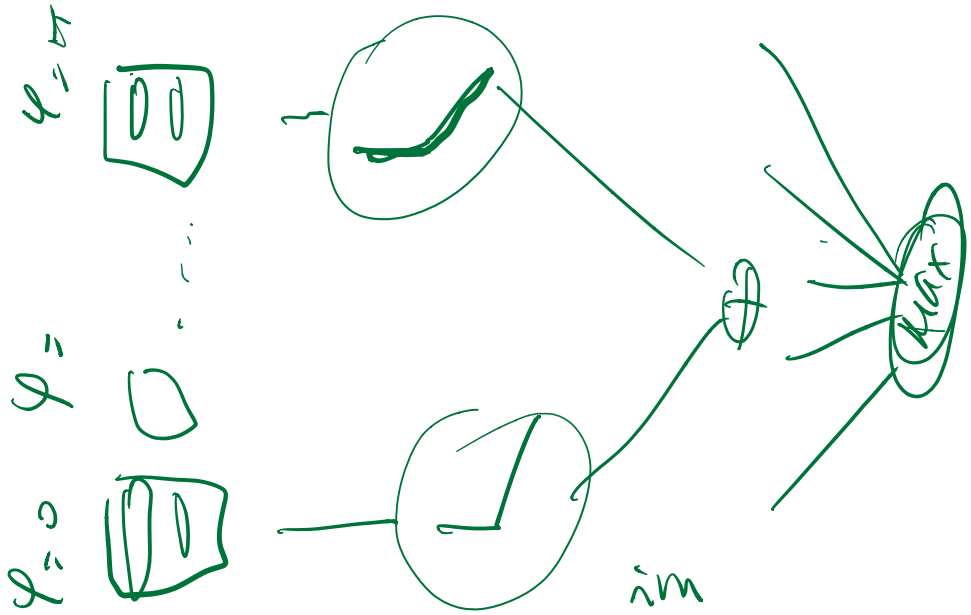
V
tester avec un B_f inconnu

Logistic Regression

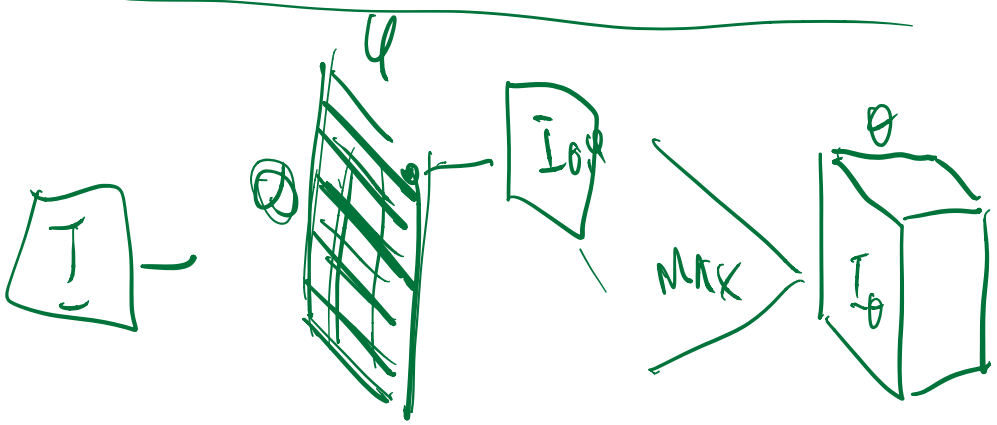


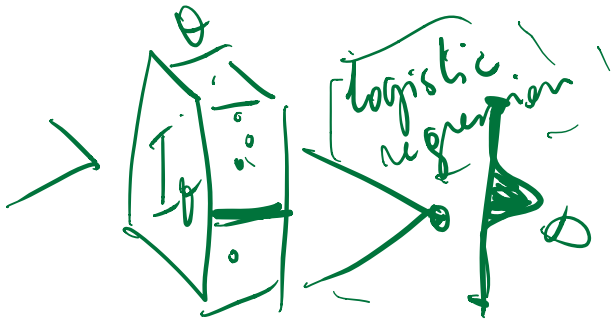
Cellular complexes

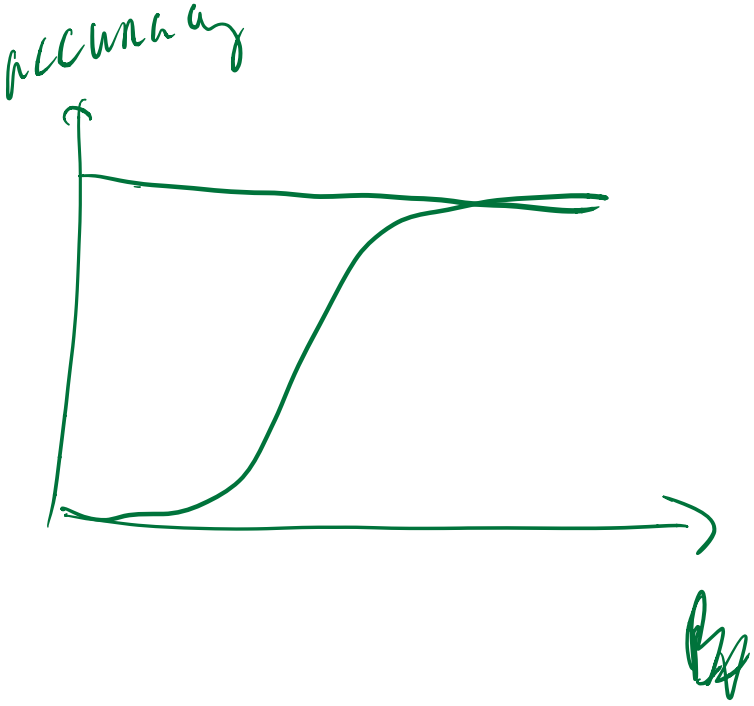


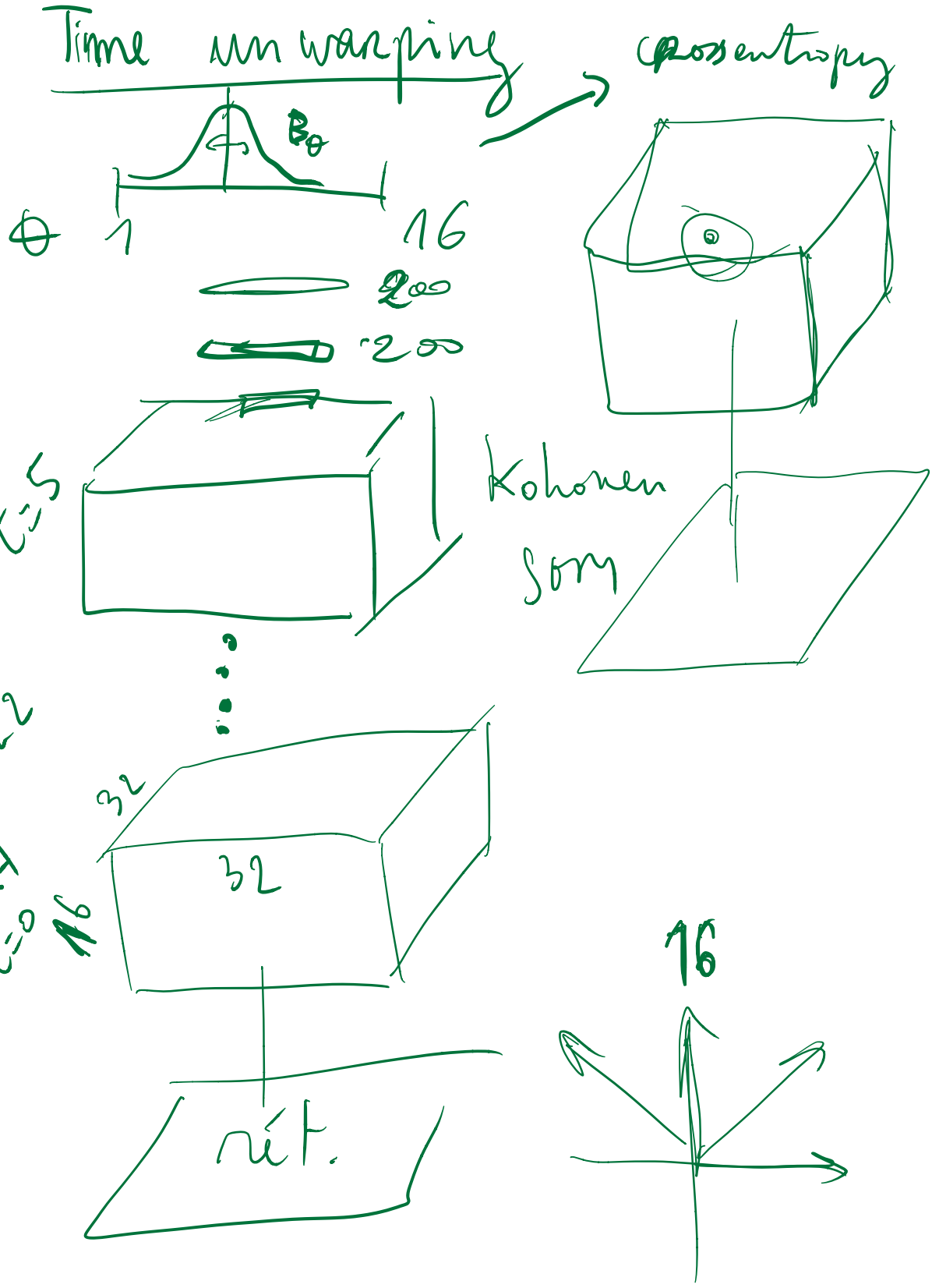


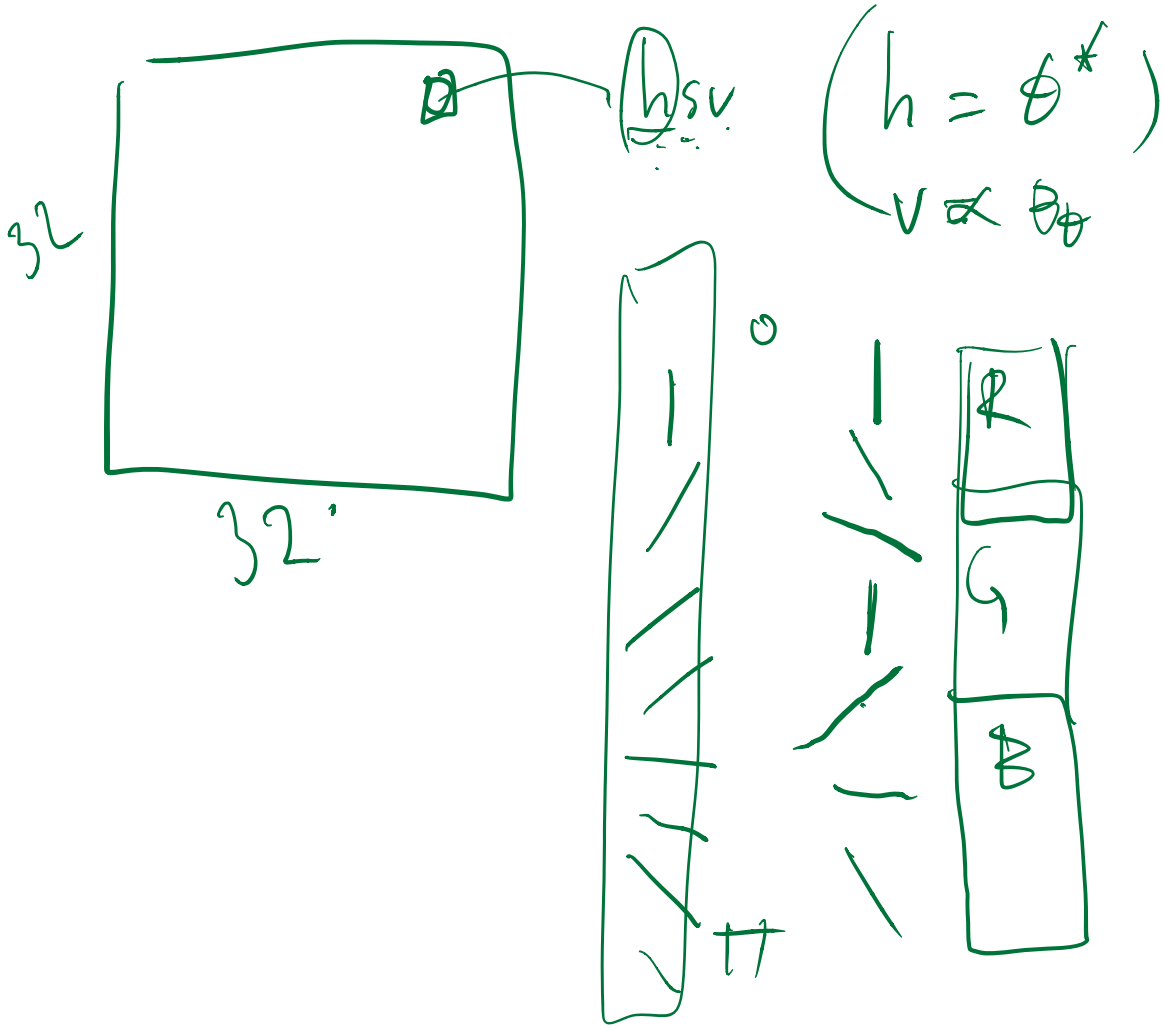
$$r^2 = x^2 + y^2$$



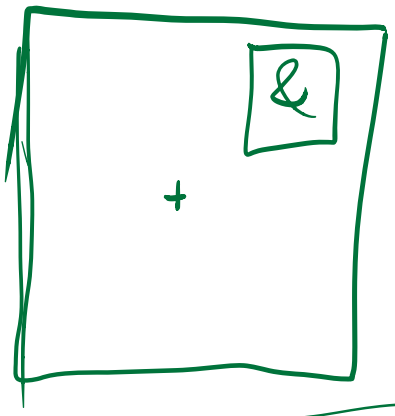

logistic regression

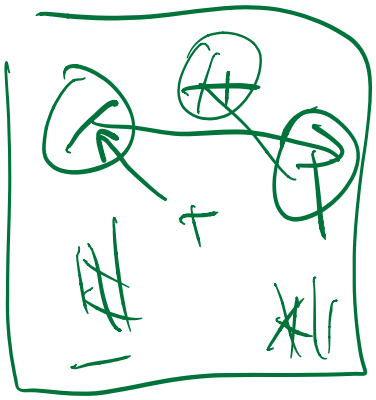

accuracy

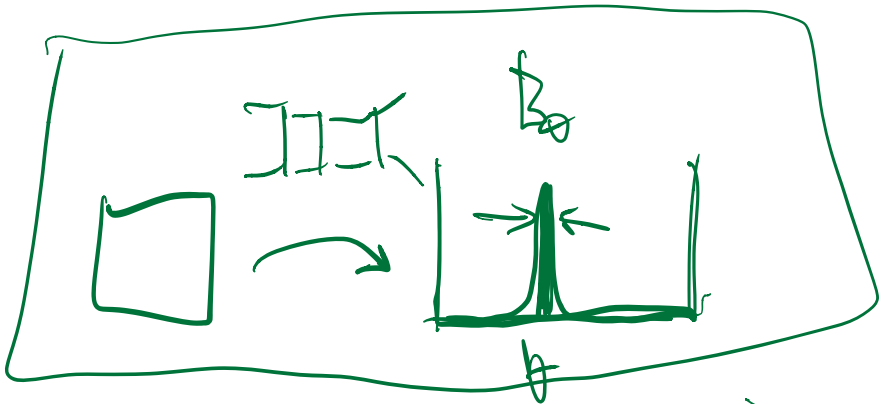

Time warping
Cross entropy
B_0
0
1
16
200
-200
K=5
Kohonen
Som
12
32
32
4
K=0
16
16
rét.


32
32
hsv
h = θ*
V ∝ Bθ
0
R
G
B

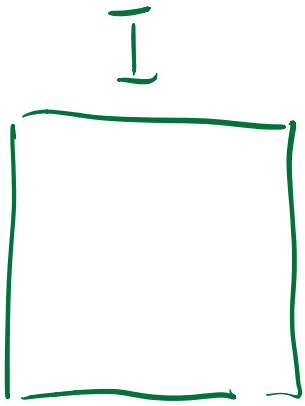
2018-05-14 of blog 2015-05-22

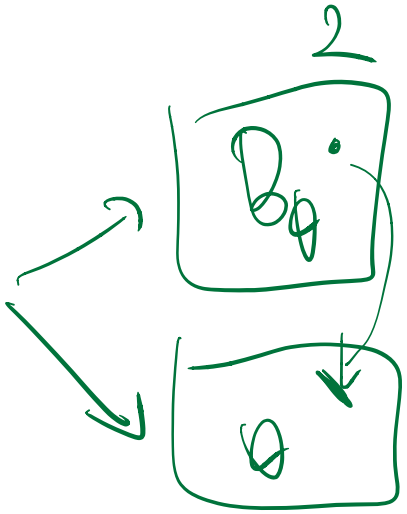


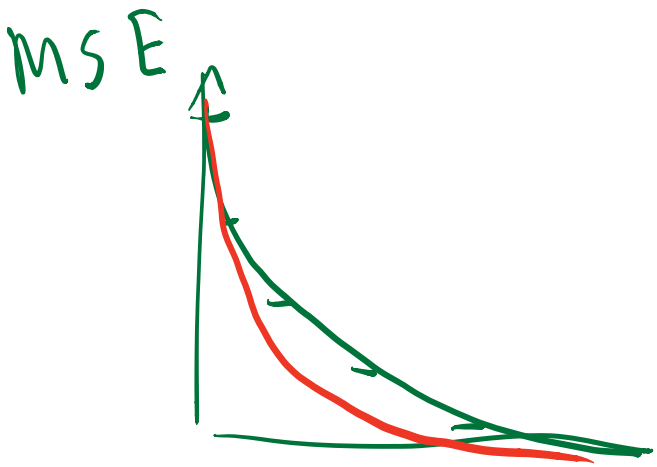


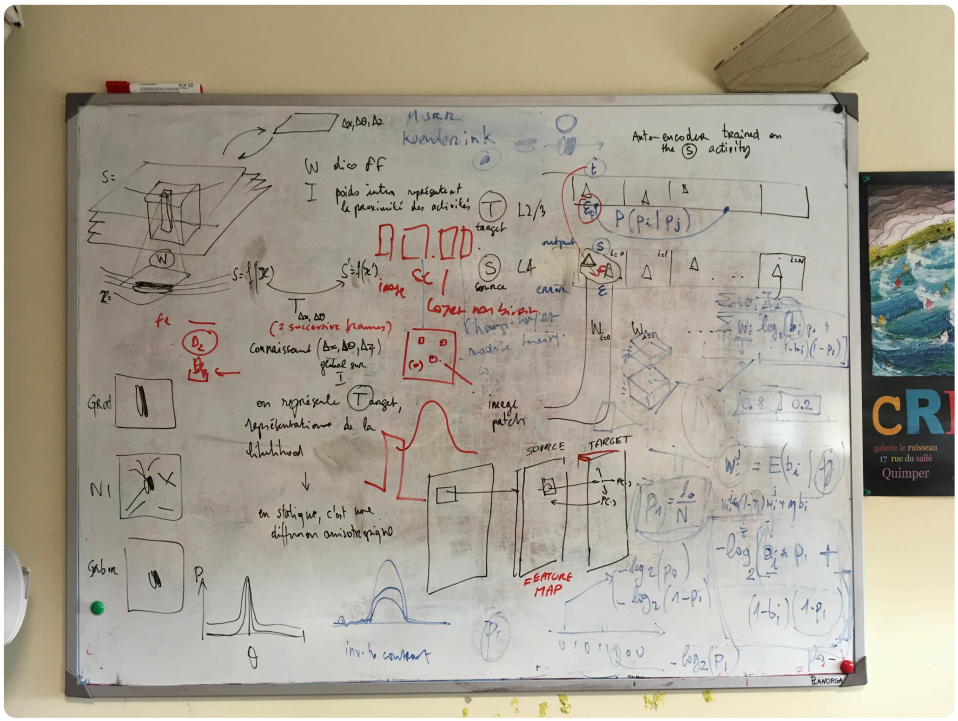


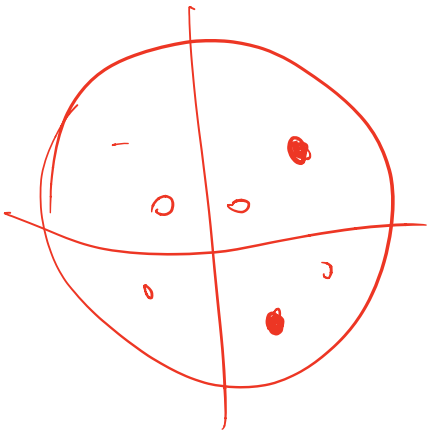
$$\frac{1}{2}\ln(2\pi e\sigma^2)$$

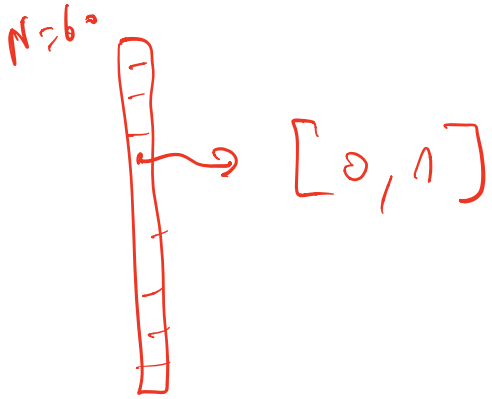


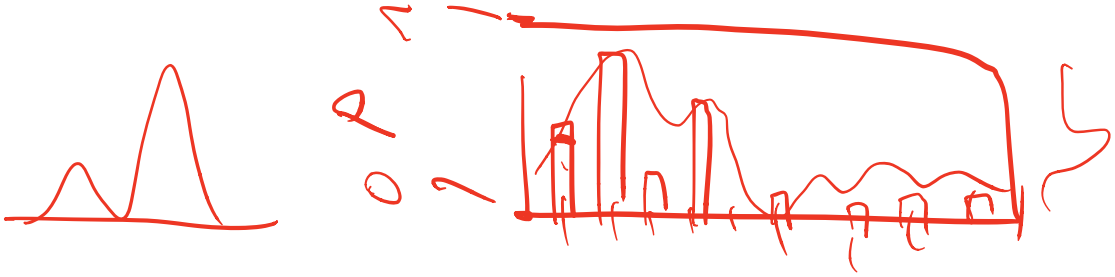



MSE

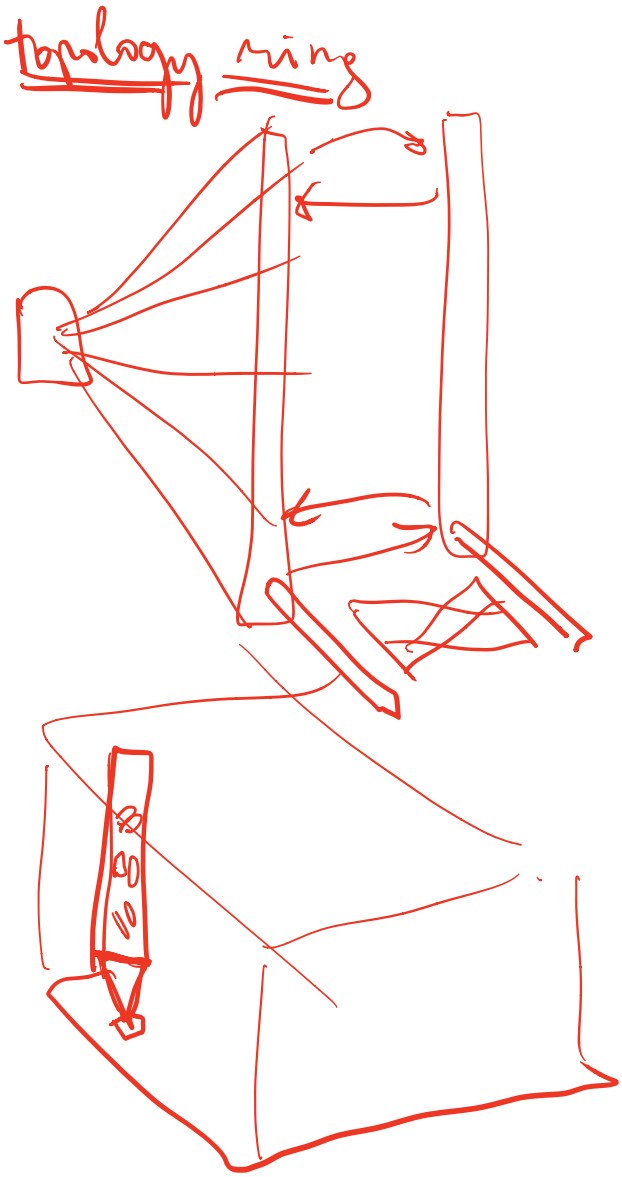

Auto-encoder trained on the S activity
L2/3
target
L4
source
error
output
SOURCE
TARGET
FEATURE MAP
Grat
N1
Gabor
Quimper

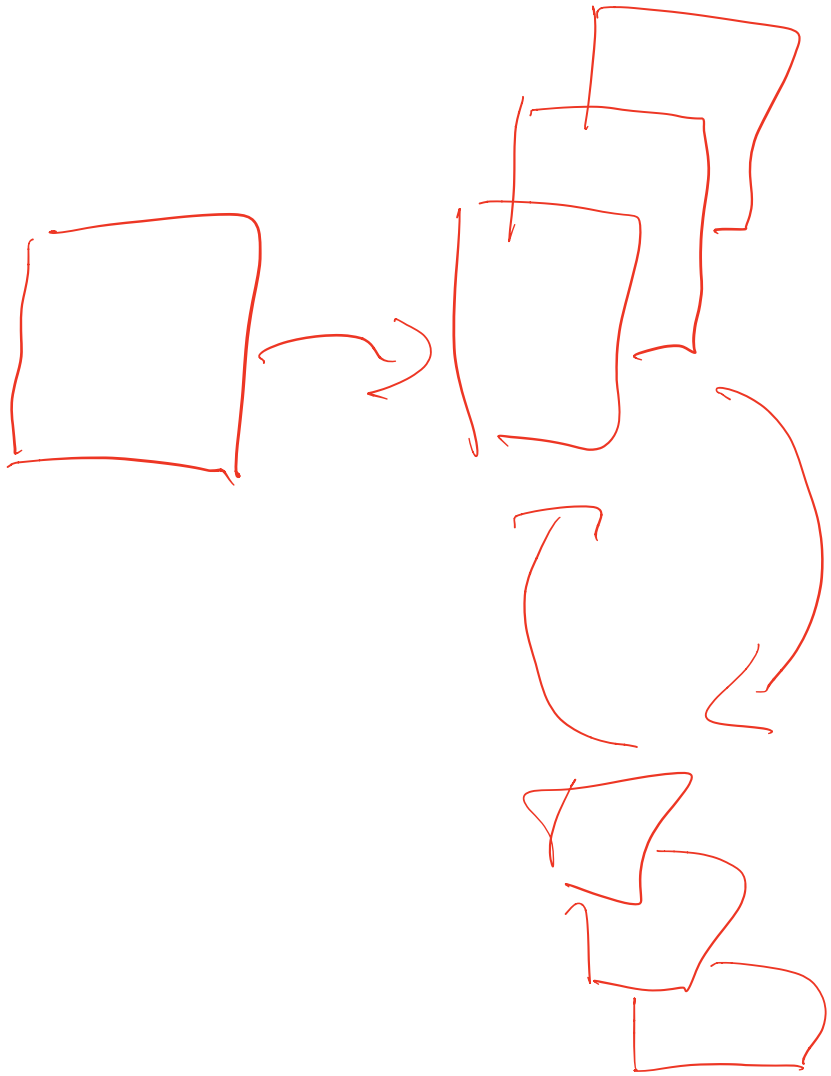


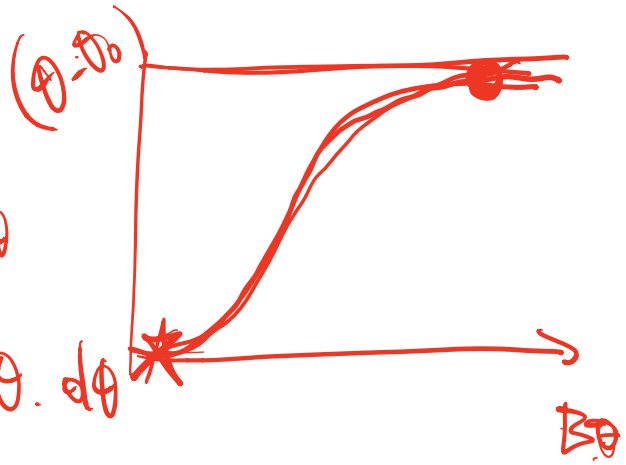




$$p \log p + (1-p) \log (1-p)$$


topology ring



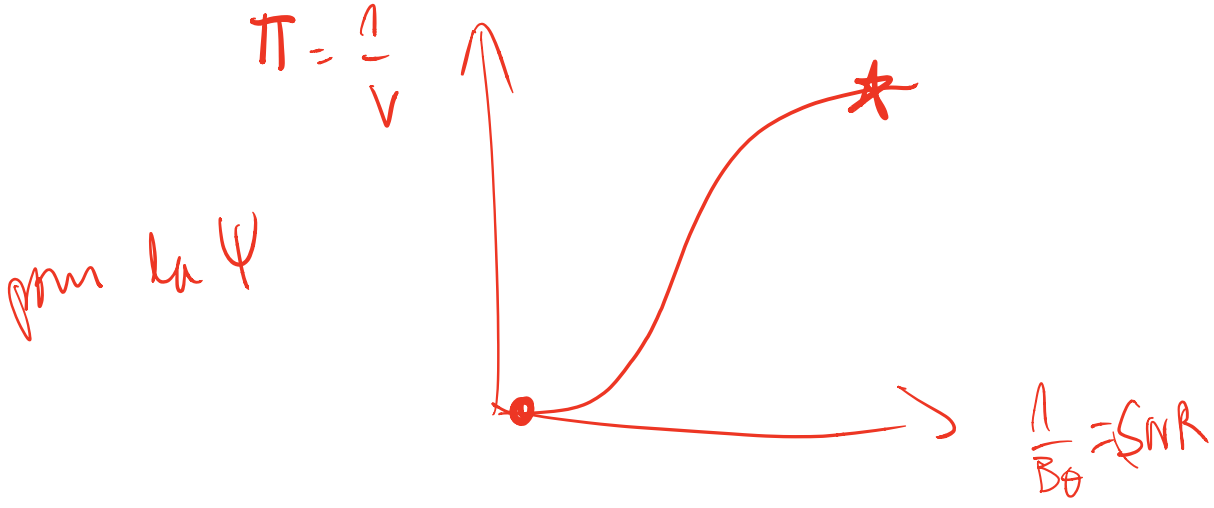


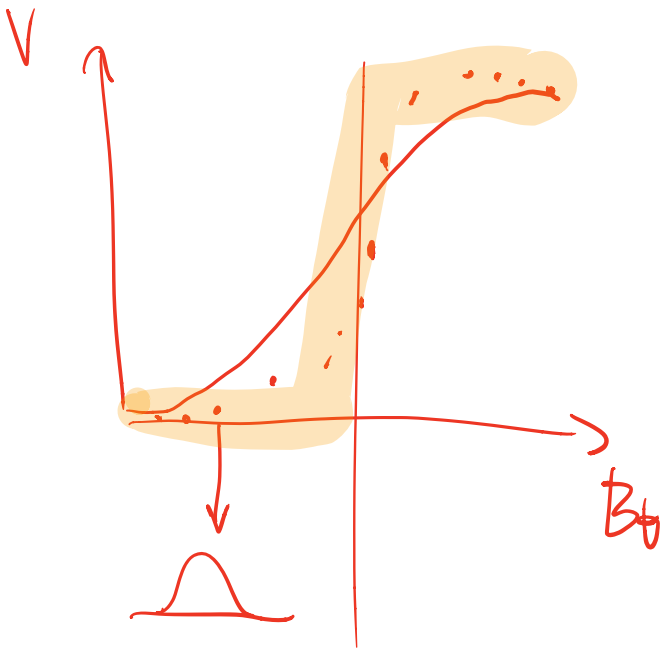
$$1 = \int p(\theta)\, d\theta$$

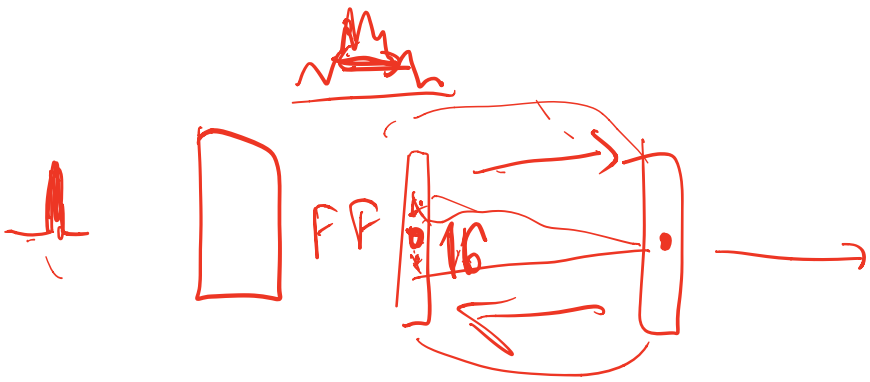
$$E(\theta) = \int p(\theta) \cdot \theta \cdot d\theta$$

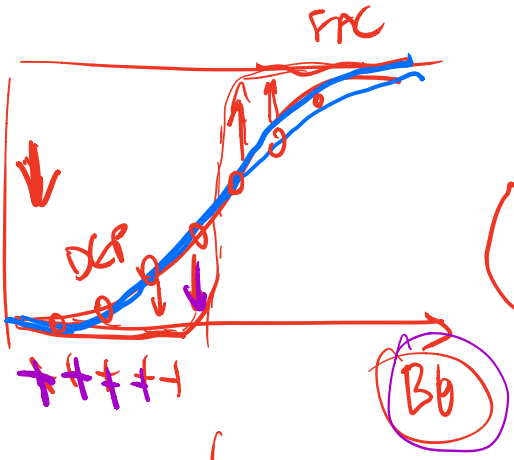
$$Var(\theta) = \int p(\theta) \left(\theta - E(\theta)\right)^2 d\theta$$

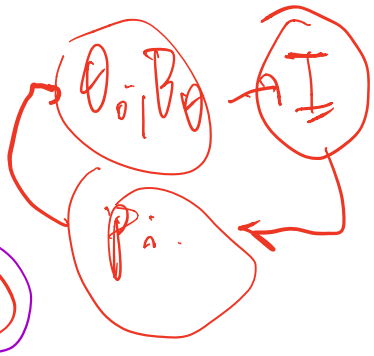
```
θ = np.linspace(0, π, 16)
m = (p * θ).sum()
v = (p * (θ - m)**2).sum()
```


$\pi = \frac{1}{V}$
ppm ln Ψ
$\frac{1}{B_0} = SNR$

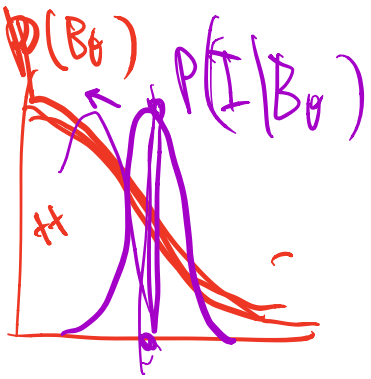

V
B_0


FF
16

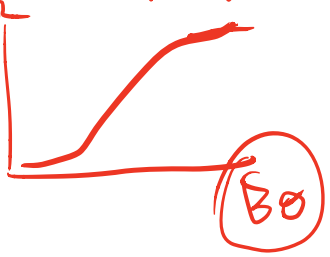




$-\log p_{\theta n} E(\theta)$

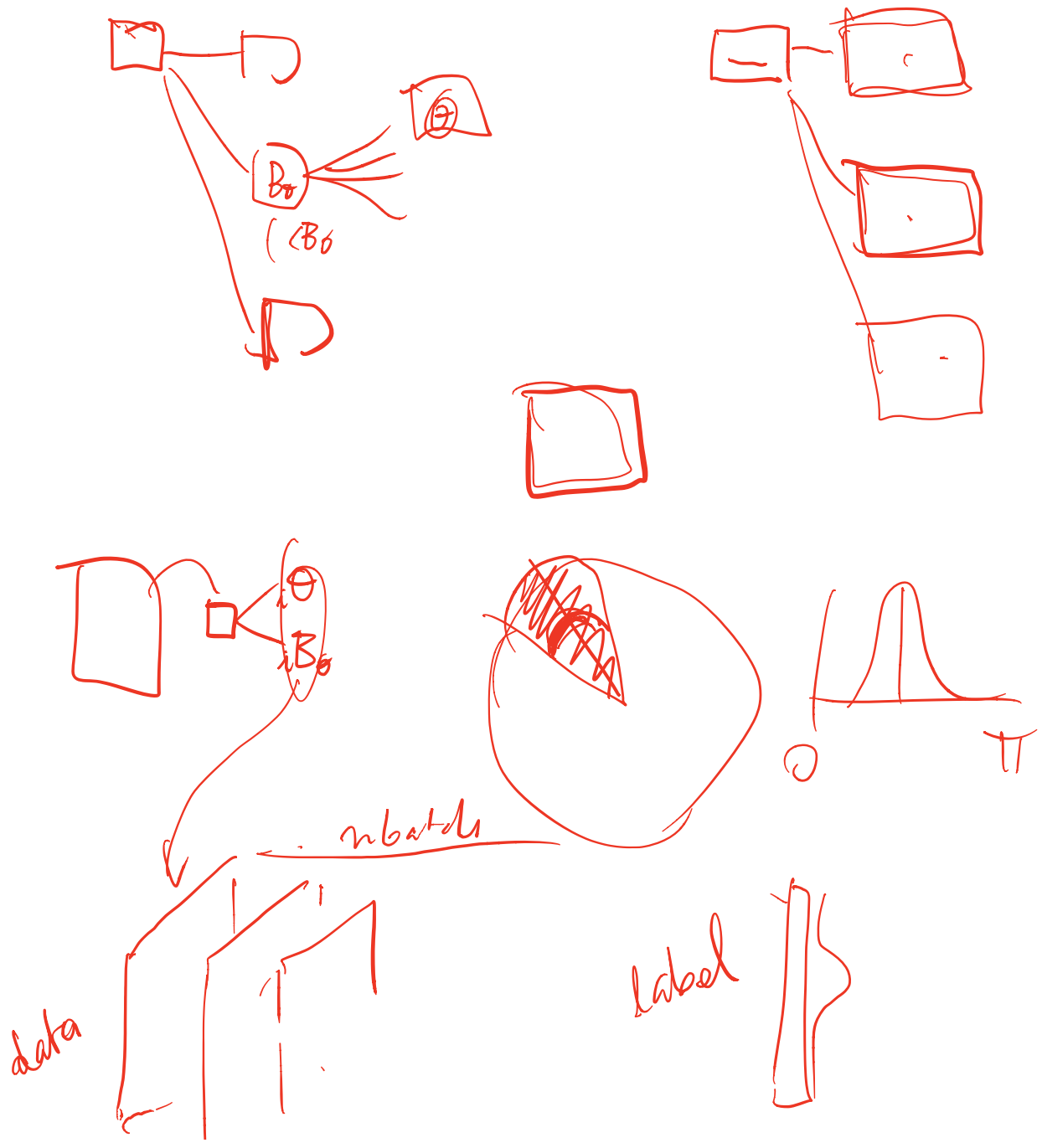


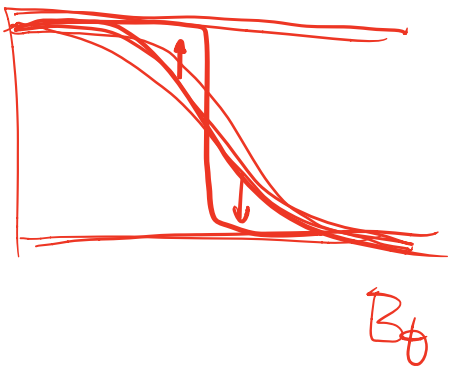
- psycho physique.



- apprentissage FP
- LSTM marche trop bien
- introduire un prior

2018-05-31

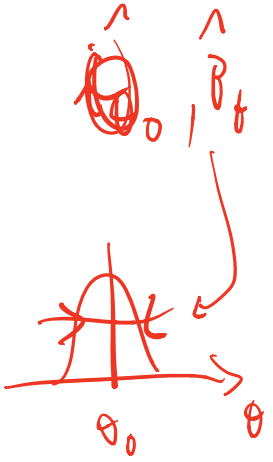




$i\theta \to \theta_0$
$iB_\theta \to B\theta$

$$p = \left(\frac{1}{2}\right)\left(\frac{\cos^2(\theta - \theta_0)}{4B_\theta^2}\right)$$

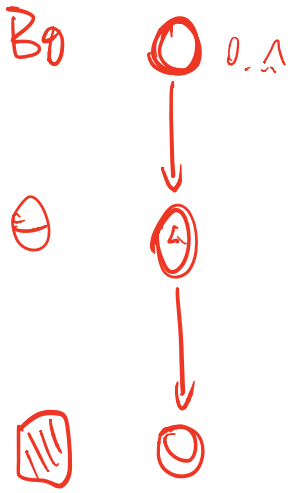
$$\Rightarrow = \mathrm{sin}(p)$$

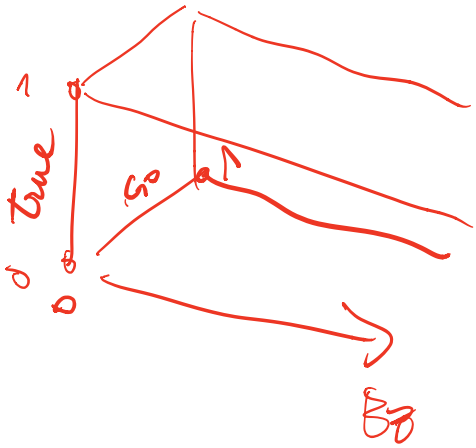


$B_\theta < \text{seuil} \Rightarrow$

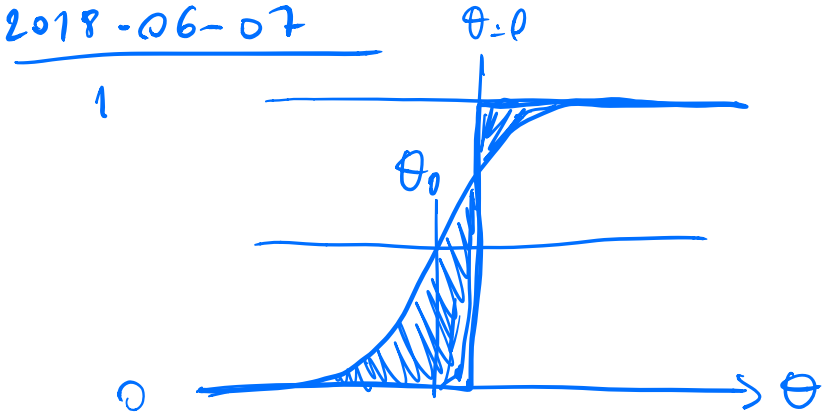
$B_\theta > \text{seuil} \Rightarrow$ 

Pascal Mamassian





2018-06-07



fit => $p = \frac{1}{1+e^{-(a+b\theta)}} = \frac{1}{1+e^{-k(\theta-\theta_0)}}$

ideal => $1_{\theta>0}$

intégrale $\quad u = 1 + e^{+x} \quad \frac{du}{dx} = +e^{+x} = u - 1$

$du = e^{x} dx$

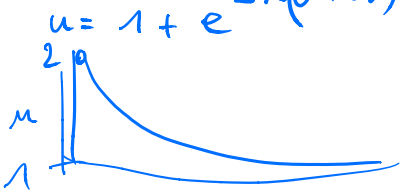
$$\int \frac{e^x}{1+e^x} dx = \int \frac{du}{u} = \log u$$

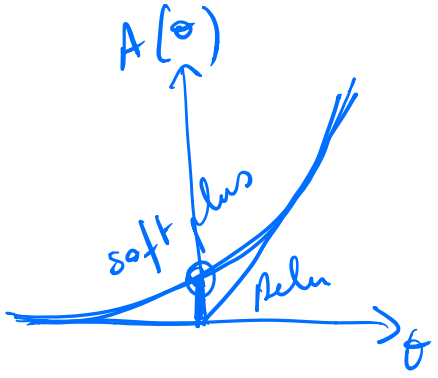
$$\int \frac{1}{1+e^{-x}} dx = \int \frac{1}{u} du = \log(1+e^x)$$

$u = 1 + e^{k\theta} \quad du = k e^{k\theta} d\theta$

$$A(\theta) = \int_{-\infty}^{\theta} \frac{1}{1+e^{-k\theta}} d\theta = \int_{\theta=-\infty}^{\theta=0} \frac{e^{k\theta}}{1+e^{k\theta}} d\theta = \frac{1}{k} \int_{u=1}^{u=2} \frac{du}{u}$$

$u = 1 + e^{-k(\theta - \theta_0)}$

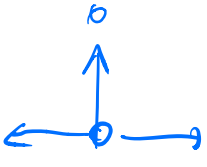




$$A = \frac{1}{k} \log 2$$

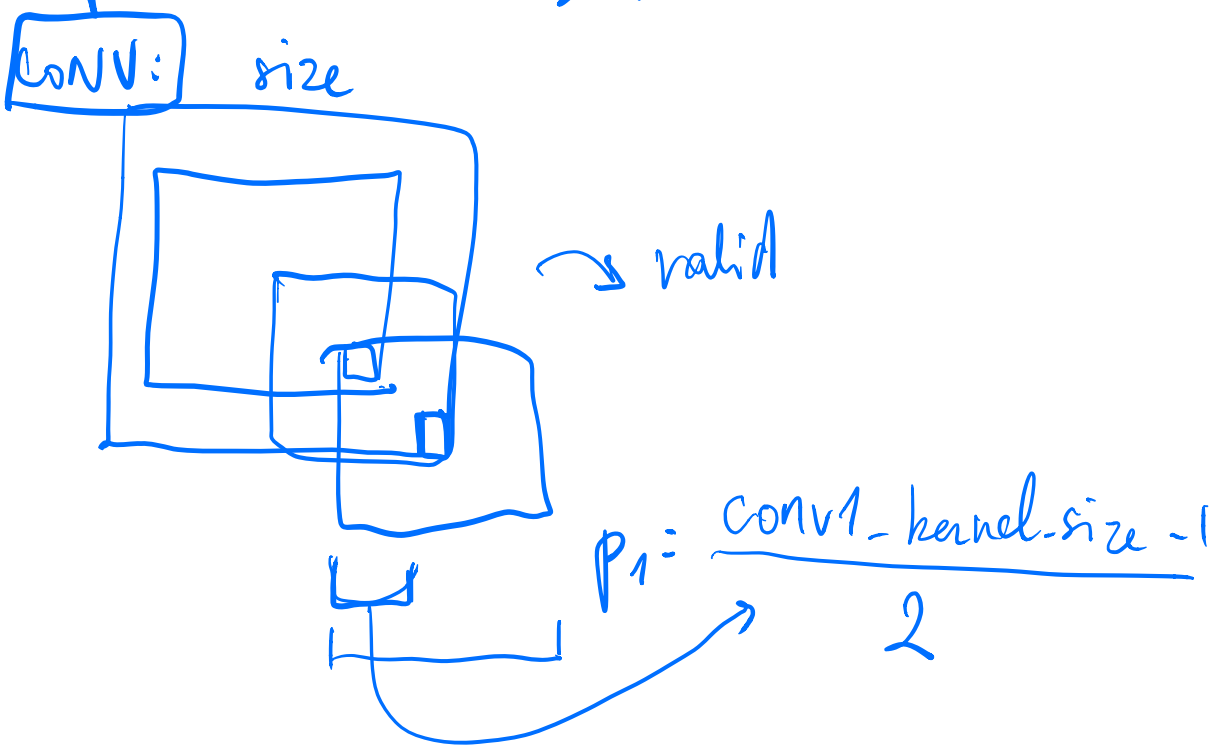
score $\propto \frac{1}{k}$

Z! θ est défini sur $-\frac{\pi}{2}, \frac{\pi}{2}$



2018-06-08

pytorch : prévoir la taille d'une conv + stride

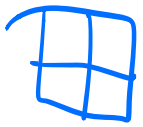


$out\_size_1 = in\_size_1 - 2 \times p_1$

$in\_size_2 = out\_size_2$

$out\_size_2 = insize_2 - 2 \times p_2$

with strides / MaxPool2D

 → 2 $\quad out\_size_1 = (in\,size_1 - 2p_1) // stride^2$

$$outsize_2 = \left(insize_2 - 2p_2\right) // stride_2$$