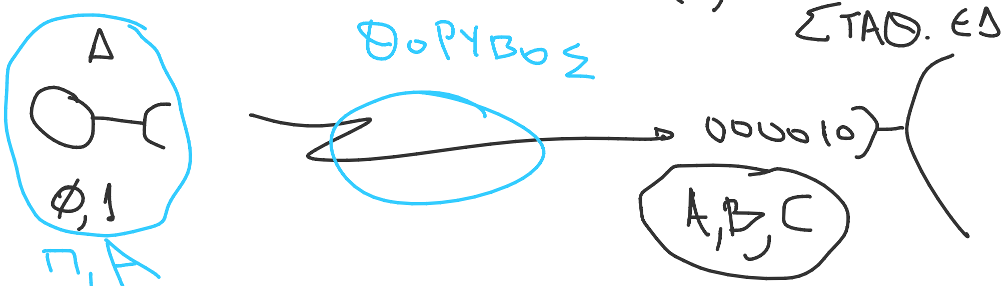
HMM

Thursday, May 21, 2020 12:09 PM

(0, 1)



P(Σ. ΔΕΚΤΗ | Σ. ΔΟΡ)

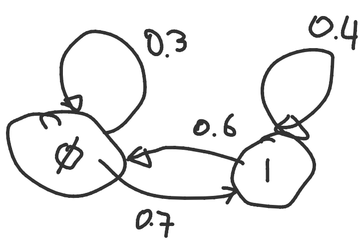
	A	B	C
0	4/10	3/10	3/10
1	1/10	1/10	8/10

A, B, B, C

0	0	0	1

ΔΕΚΤ

ΔΟΡ	0	1
0	0.8	0.2
1	0.9	0.1



A

	0	1
0	0.3	0.7
1	0.6	0.4

$$A = \begin{array}{c|cc} & 0 & 1 \\ \hline 0 & 0 & 1 \\ 1 & 1 & 0 \end{array}$$

1 1 1 1 1 1

$$\Pi = \begin{bmatrix} 0.5 \\ 0.5 \end{bmatrix}$$

1 0 0

1010101- . . .

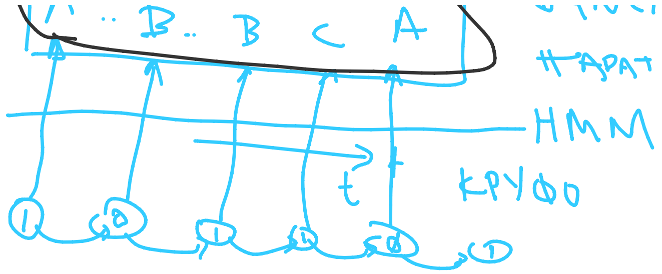
0

1010101. . . .

A .. B .. B C A

ΦΑΝΕΡ. ΚΑΤ

ΠΑΡΑΤ

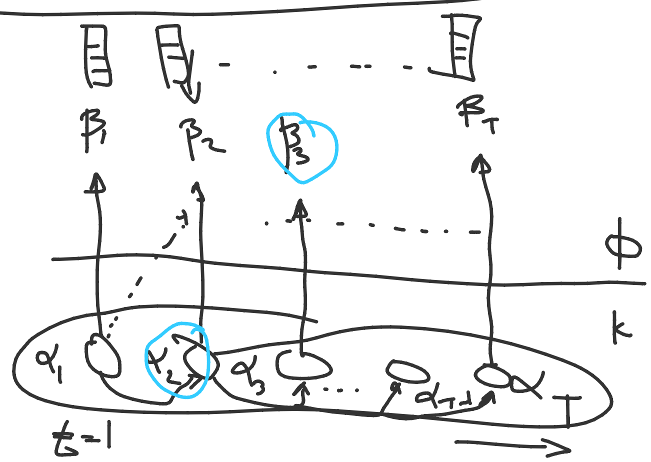


$P(\underbrace{0110111}) = ?$ $\quad \boxed{\pi, A, (B)}$

① $\boxed{P(A_1 \ldots\ldots A) = ?}$

② ΓΝΩΡΙΖΟΝΤΑΣ ΤΗΝ ΑΚΟΛ. ΠΑΡΑΤ.
~~ΜΑΘ~~ ΠΟΙΑ ΕΙΝΑΙ Η ΠΛΕΟΝ ΠΙΘ. ΑΚΟ.
ΚΡΥΦΩΝ. ΚΑΤ.

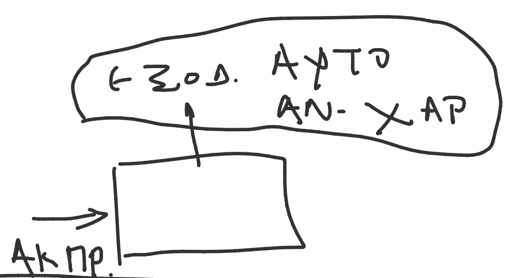
③ ΕΚΠΑΙΔΕΥΣΗ



1): ΚΡΥΦΟ: ΜΑΡΚΟΒ-1

2): ΔΕΝ ΧΑΝΩ ΚΡΥΦΑ ΣΥΜ

3): β_t ΕΞΑΡ ΑΠΟ α_t



$\alpha_t \in Q = \{q_1, q_2, \ldots, q_N\}$ $\quad$ ∅, 1

$\beta_t \in S = \{s_1, \ldots\ldots, s_M\}$ $\quad P(A) = \sum_i P(A, B_i) \qquad \cup B_i = \Omega$

$P(A, B) = P(A|B) \cdot P(B)$

$$\boxed{P(\beta_1, \ldots, \beta_T)} = \sum_{A_m} P(\beta_1, \ldots, \beta_T, A_m) =$$

$$A_m = (\alpha_1, \alpha_2 \ldots \alpha_T)$$

$$P(\alpha_1, \alpha_2 \ldots\ldots \alpha_T)$$

$$= \sum P(\beta_1 \ldots \beta_T | A_m) \cdot P(A_m) =$$

$$= \sum_{A_m} P(\beta_1 \dots \beta_T | A_m) \cdot \underbrace{\overset{p(\alpha_1, \alpha_2 \dots \alpha_T)}{P(A_m)}} =$$

$$= \sum_{A_m} \underbrace{p(\beta_1 \dots \beta_T | A_m)} \cdot p(\alpha_1) \prod_{t=2}^{T} p(\alpha_t | \alpha_{t-1}) =$$

$$= \underbrace{\boxed{\sum_{A_m} \overset{B}{\left(\prod_{t=1}^{T} p(\beta_t | \alpha_t) \right)} \overset{\Pi}{p(\alpha_1)} \cdot \overset{A}{\left(\prod_{t=2}^{T} p(\alpha_t | \alpha_{t-1}) \right)}}} = P(\beta_1, \dots, \beta_T)$$

$$\lambda = (\overset{24}{\Pi}, \overset{24^2}{A}, \overset{24^2}{B})$$

$10 \times$

$M = 24$

$N = 24$

$T = 10$

$$\boxed{\epsilon\ \Xi\ \epsilon\ T\ A\ \Sigma\ \epsilon\ \iota\ \Sigma\ \epsilon}$$

$$\underbrace{24 \quad 24}_{24^2} \cdot \ - \ - \ -$$

$$\boxed{\# A_m = N^T}$$