1. Big Data → Hadoop

2. Data Analytics

3. Data Science

4. Machine Learning

5. Deep Learning

6. AI

7. AGI

How humans learn?

1. Supervised learning

2. Unsupervised learning

3. Reinforcement learning

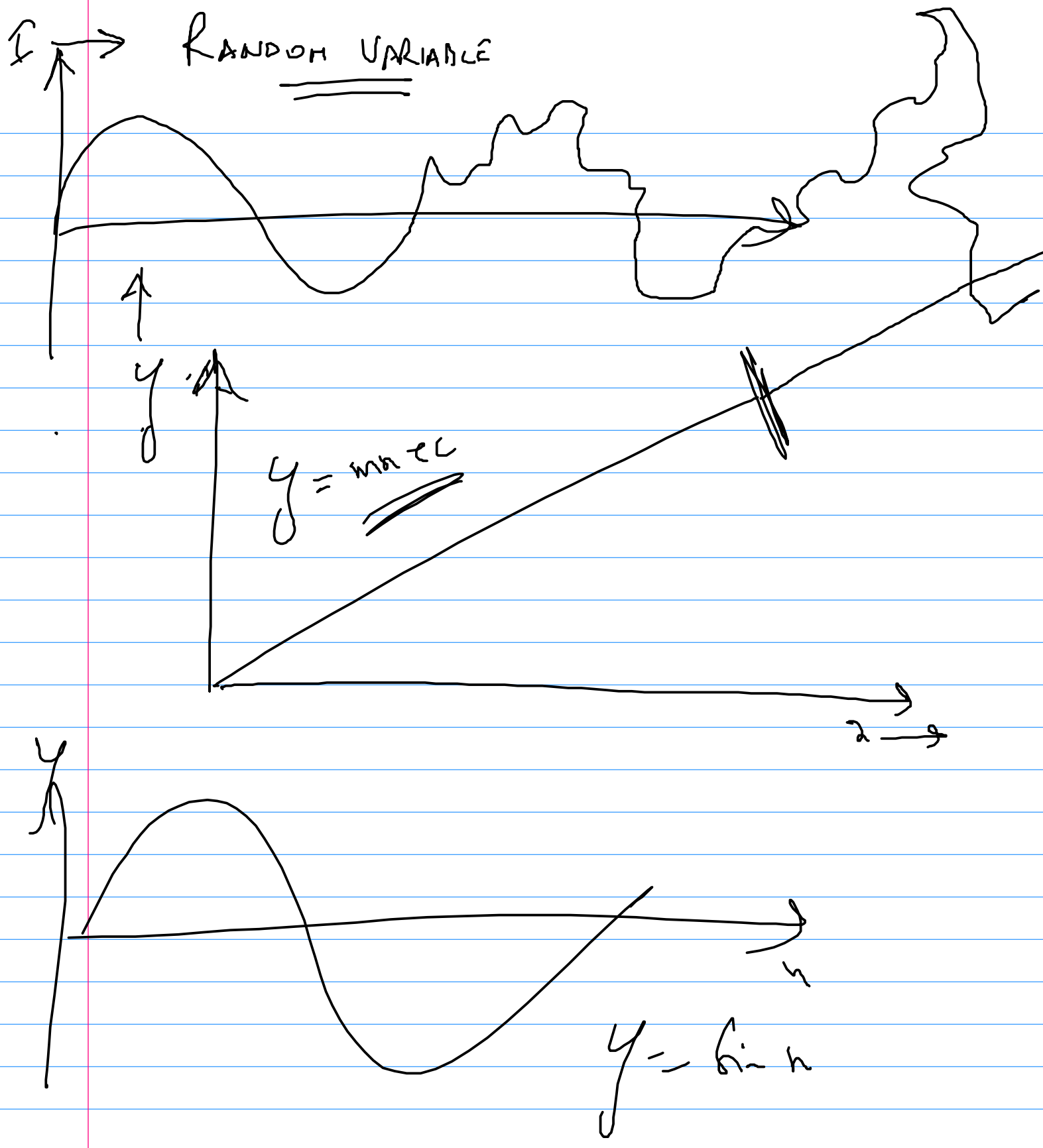
Computer Vision

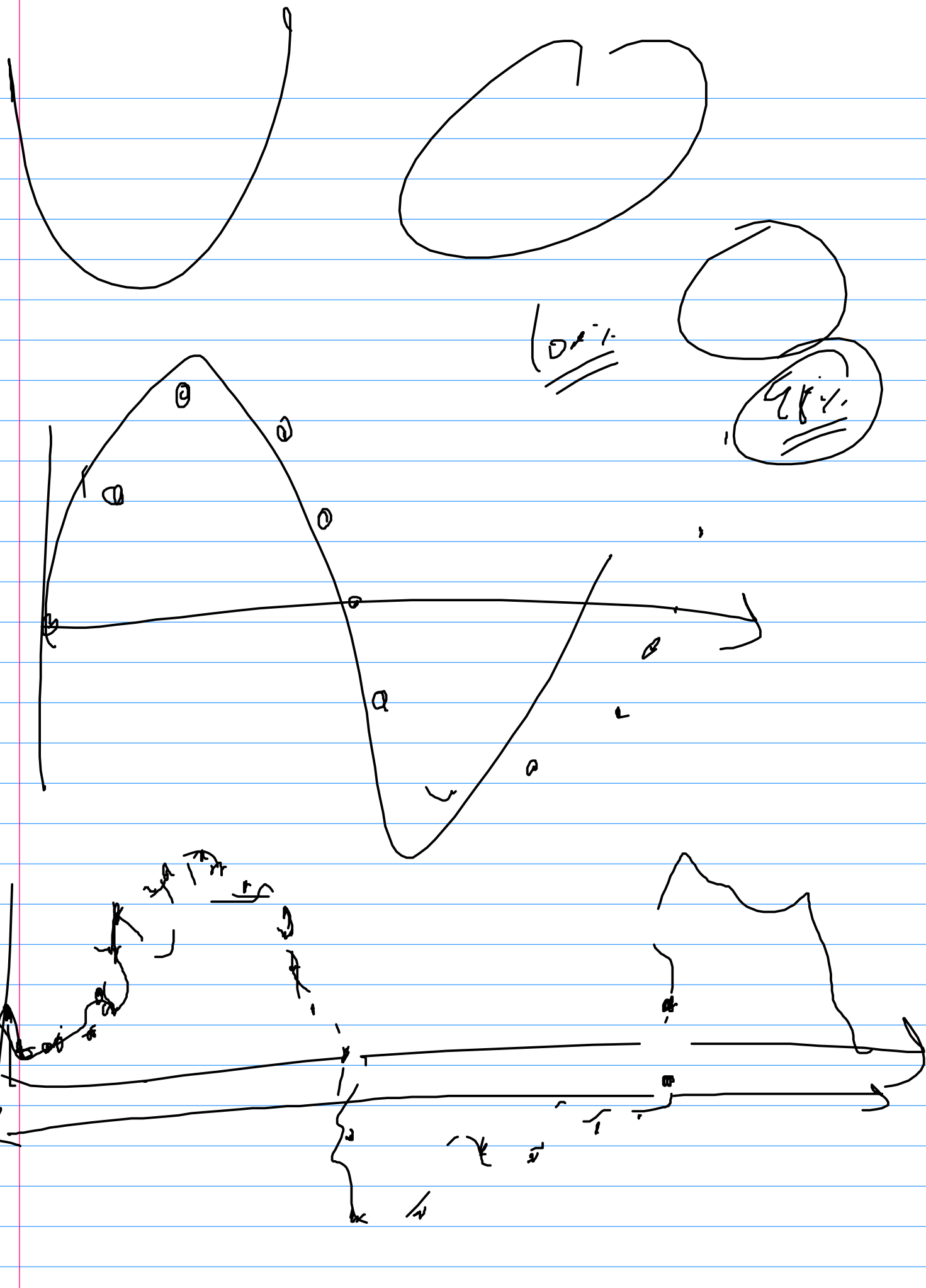
QA Engineer

QL

Natural Language Processing

Speech Processing


I
RANDOM VARIABLE
y
y = mx + c
x
y
x
y = sin x

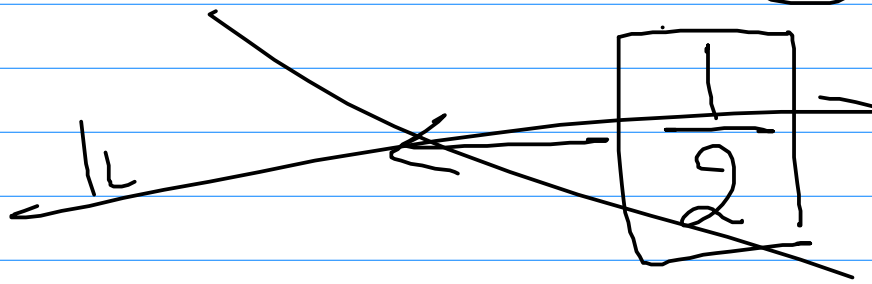


PROBABILITY & STATISTICS

$\frac{1}{2} = 0.5$

PROBABILITY ⟹

$T = 0.5$



7

[5, 6, 4, 7, 9, 7, 4, 5]

1 — 8

2 — 8

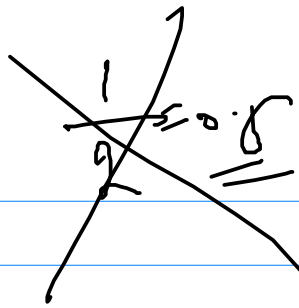
8

DISCRÈTE RV

FREQUENCY

RELATIVE FREQUENCY

the fair → H ⟹ $\frac{0}{1} = 0$



biased → H ⟹ $\frac{0}{2} = 0$

⟹ T ⟹ $1/3 = 0.33$

≈ 0.5

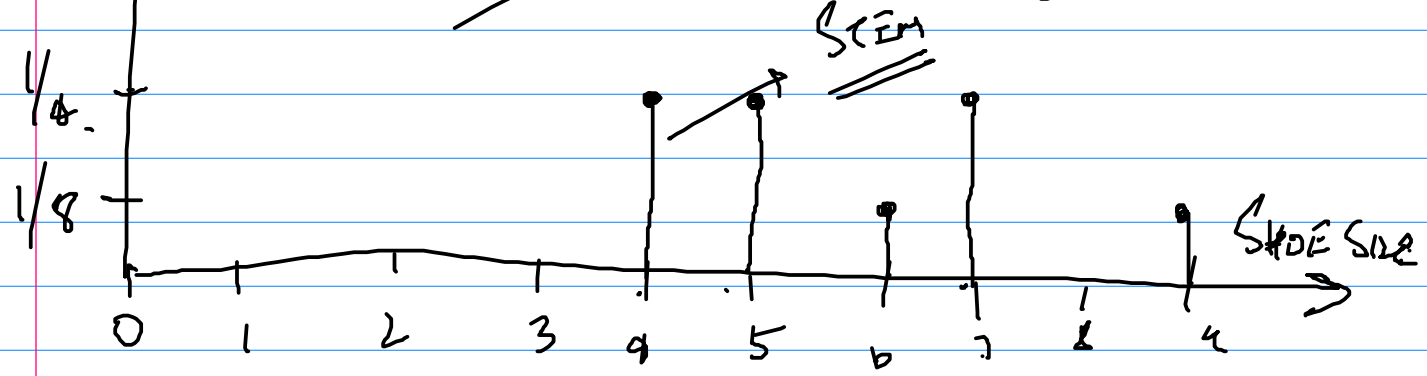
$\frac{49,73,591}{\text{Crowd}} = 0.\overline{973591}$

FREQUENCY DISTRIBUTION

FREQUENCY → PROBABILITY DISTRIBUTION

FREQUENCY DISTRIBUTION

DISCRETE



5 → Number of Heads → Discrete RV

2 → 0.5

$\frac{40}{28} \times \frac{60}{100}$ [illegible]

	DS	NDS
M	40	20
F	35	5

36%

$P(\ ) \quad \frac{40}{60} = \frac{2}{3}$

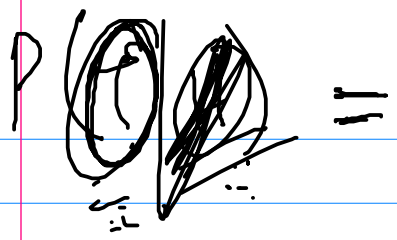
$$\frac{40}{60} = \frac{\frac{40}{100}}{\frac{60}{100}} = \frac{P(M \cap DS)}{P(M)}$$

$$P(DS \mid M) = \frac{P(DS \cap M)}{P(M)}$$

$$P(A \mid B) = \frac{P(A \cap B)}{P(B)}$$

$3/7$

3R



$=$

$\frac{1}{2}$

$P(G|G)$