BMI :

Spike trail : 98 neural units :

recorded 182 times along each of 8 different reaching angles.

→ check the Task Data .mat File

this can be something like instances in ML.

100 trials × 8 → features? Right? → reaching angles.

- trialId
- Spikes : 98 × 672 ← Neural Data
- handPos : 3 × 672 ← hand Position Data.

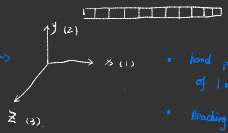
neural unit index

$\begin{bmatrix} x \\ y \\ z \end{bmatrix}^T$

Rmk : the neural and arm trajectory are taken from 320 ms before movement onset until 100 ms after movement end

- why do we have dimension of 672 ?
  - this is the sampling dimension I believe
  - It can be different from each trial and each angle
- what does the reaching angles mean here? Does it mean that we are going to draw a straight line according to this angle ?

- At time discretized sequence of zeros and ones with time step of 1 ms.
- 0 / 1 spike → spike represents the presence or absence of a spike in its neural unit in 1ms time window.
- trial(n, k).spikes(i, :) → this is a piece of data information
  - trial idx: [1, 100]
  - angle idx: [1, 8]
  - unit idx: [1, 98]



- Hand position in [mm] at each time step of 1 ms.
- Reaching angle : [30, 70, 110, 150, 190, 230, 310, 350] / 180π