

PerceptronModel

cellSpan
k_neighbors

learning_mode : dict learning_rate : int

mode: int modes: dict noise particles: list

perceptron

compute_error(particle: Particle, neighbors: list[Particle], input_vec: list)
get_prediction(input_vec: list)

get_prediction(input_vec. list)
get_target(neighbors: list[Particle])

learn()

neighbors_to_input_vec(neighbors: list[Particle], distances: list[float])

update()

VicsekModel cellSpan k_neighbors mode: int modes: dict noise particles: list

get_new_particle_vicsek(particle: Particle, neighbors: list[Particle])
update()

Particle

angle: float

k neighbors : list, NoneType

x : float y : float

Perceptron

perceptron perceptron

lambda_reg : float
weights : NoneType

forward(input vec: ArrayLike)

update_weights(input_vec: ArrayLike, error: float, learning_rate: float)

RunningAverage

total : float

add(value: float) average(count: int)

Timer

 $end_time:NoneType$

name: str

start_time : NoneType

end() show() start()