AV NET Agent(DQN) - AV_NET: torch.nn.Sequential - DEVICE: torch.device init () - LOSS: torch.nn.MSELoss + forward(av: t): t - BATCH SIZE: int - AV NET - MEM SIZE: int - ACTION SPACE: list of ints QNETWORK - LR: float - Q net: torch.nn.Sequential - EPS DEC: float - OPTIMIZER: torch.optim.Adam - EPS MIN: float - DEVICE: torch.device EPSILON: float - Q_NET + init (OUTPUT: int, LR: float, - GAMMA: float SCALAR INPUT: int, D) init (LR: float, N ACTIONS: int, + forward(av: t, scalar obs: t): t BATCH SIZE: int, EPS START: float, EPS END: float, EPS DEC: float, MAX MEM SIZE: int, GUP: boolean) MemoryDQN + act(av: t, scalar obs: t): |- MEM SIZE: int av: t, scalar obs: t, action: int - counter: int + act test(av: t, scalar obs: t): - DEVICE: torch.device av: t, scalar obs: t, action: int |- AV: t + learn() - SCALAR OBS: t + store model(PATH: str) I- ACTION: t + load model(PATH: str) I- REWARD: t - IS TERMINAL: t torch.Tensor = t |- AV : t - SCALAR OBS: t + init (MAX MEM SIZE:int, AV DIMENSION: int, SCALAR OBS DIMENSION: int, BATCH SIZE: int, DEVICE: torch.device) - MEM + store(av:t, scalar obs: t, action: int, reward: float, terminal: boolean, av : t, scalar obs : t): t + get data(manuel batch size: int or None): t, t, t, t, t, t, numpy.ndarray