# RESULTS FROM EXPERIMENTS

SKANDA VAIDYANATH
INSTITUTE OF CREATIVE TECHNOLOGIES
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### **ENVIRONMENTS USED**

- NORMAL ENVIRONMENT
- ENVIRONMENT WITH MILD REWARD SHAPING
- ENVIRONMENT WITH REWARD SHAPING

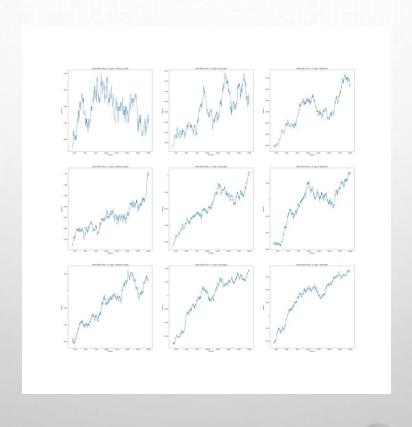


### NORMAL ENVIRONMENT

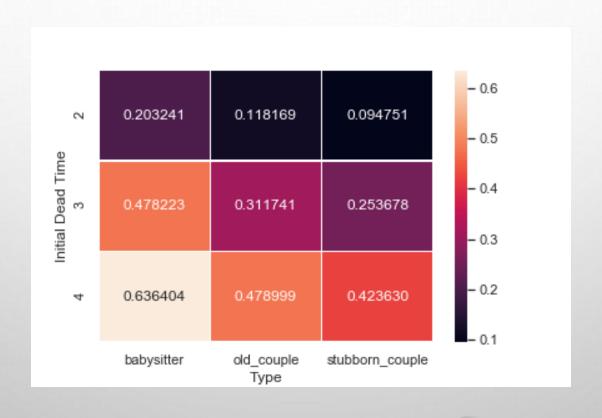
- GROUP SAVED: +5000
- GROUP KILLED: -5000



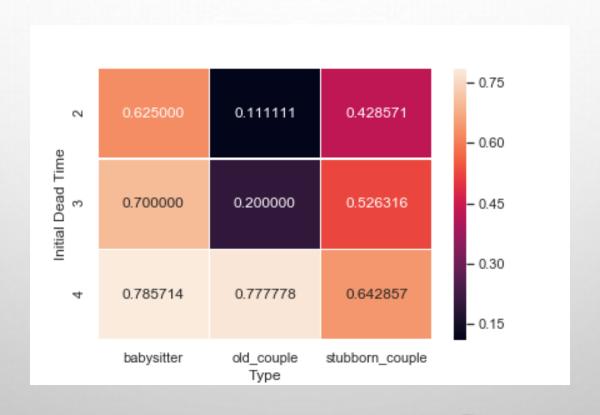
# TRAINING CURVES



## TRAINING STATS (% OF GROUPS SAVED)







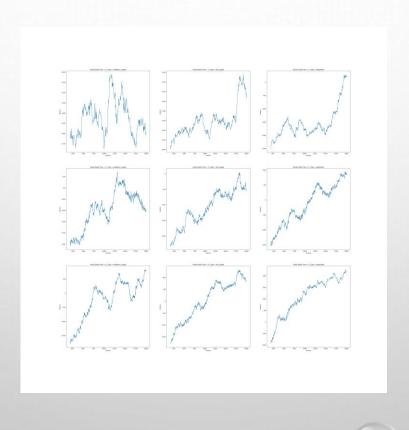


#### MILD REWARD SHAPING

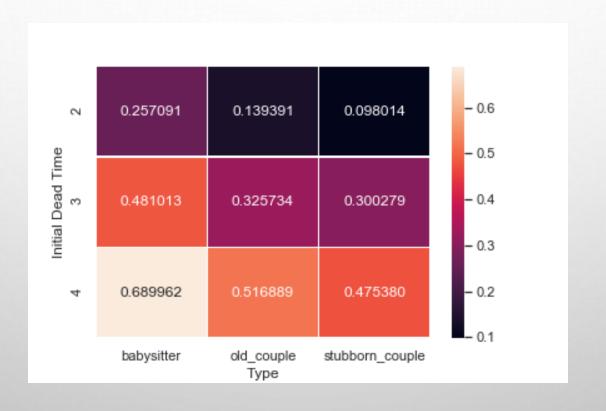
- INTERRUPT OPERATOR REWARD = (OP-BUSY \* 100)
- INTERRUPT OPERATOR WHEN ALREADY IN STATUS ON: -50
- GROUP SAVED: +3000
- GROUP KILLED: -3000



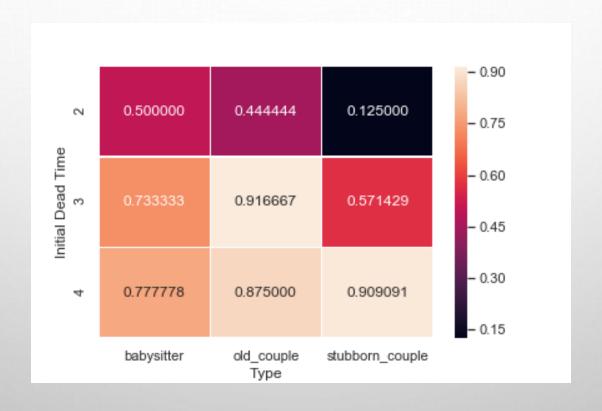
# TRAINING CURVES



## TRAINING STATS (% OF GROUPS SAVED)







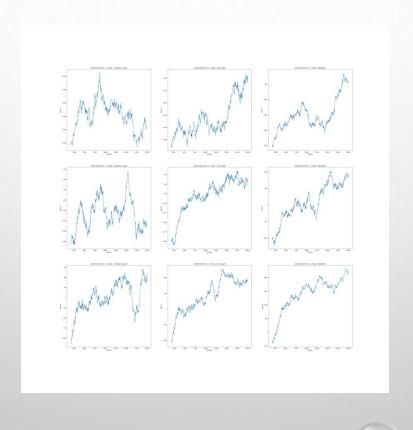


#### REWARD SHAPING

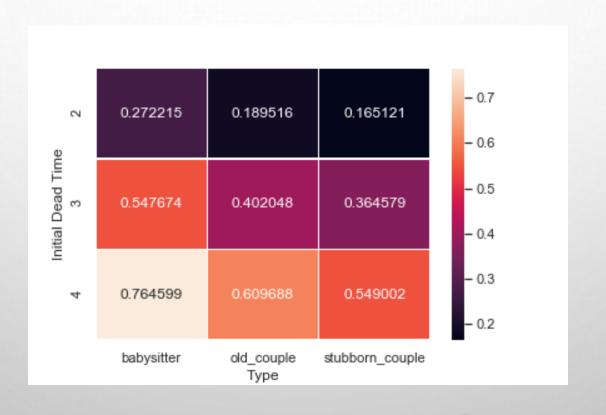
- INTERRUPT OPERATOR REWARD = (OP-BUSY \* 100)
- INTERRUPT OPERATOR WHEN ALREADY IN STATUS ON: -50
- WRONG GUIDE: -50
- WRONG GUIDE ENQUIRY (AT THE WRONG TIME): -50
- CORRECT GUIDE ENQUIRY (AT THE WRONG TIME): +50
- ON/SPN/WARN WHEN ALREADY CONVINCED: -50
- GROUP SAVED: +3000
- GROUP KILLED: -3000



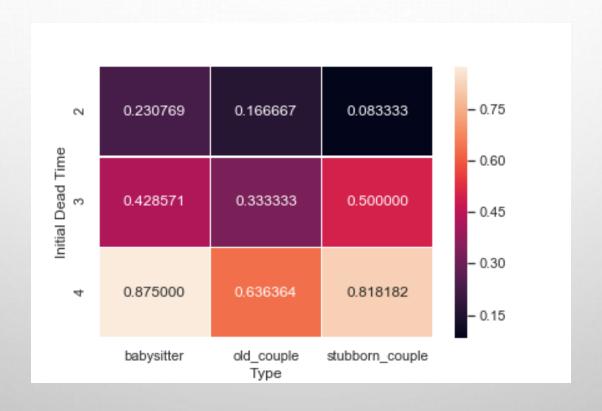
# TRAINING CURVES



## TRAINING STATS (% OF GROUPS SAVED)









#### **OBSERVATIONS**

- BETTER INDICATION OF CONVERGENCE/IMPROVEMENT FOR HIGHER DEAD TIME
  INITIALIZATIONS
- BETTER INDICATION OF CONVERGENCE/IMPROVEMENT FOR BABYSITTER > OLD COUPLE > STUBBORN COUPLE
- DOESN'T SEEM LIKE ANY ONE ENVIRONMENT IS MUCH BETTER THAN THE OTHERS.