Primo test: trovare anomalie in steps a velocità 2

Rule template: go at speed 2 if $P_0 >= x_1$ or

$$P_2 \le x_2 \text{ or } (P_0 \ge x_3 \text{ and } P_1 \ge x_4)$$

and $x_1 >= 0.70$

Rule: go at speed 2 if $P_0 >= 0.88$ or

 $P_2 \le 0.017 \text{ or } (P_0 \ge 0.714 \text{ and } P_1 \ge 0.113)$

Anomalies: (0) ANOMALY: run .\example_velreg_trace\Run_5 step 0:

action 2 with belief P_0 = 0.335 P_1 = 0.331 P_2 = 0.334 --- Hellinger =

0.2763369781773207

(Not) (1)run .\example_velreg_trace\Run_9 step 12:

Anomalies: action 2 with belief P_0 = 0.678 P_1 = 0.228 P_2 = 0.094 --- Hellinger =

0.03181114656894828

Secondo test: trovare anomalie in steps a velocità 0

Rule template: go at speed 0 if $P_2 >= x_1$ or

$$P_0 \le X_2$$
 or $(P_1 \ge x_3)$ and $P_2 \ge x_4)$ and $x_1 \ge 0.70$

Rule: go at speed 0 if $P_2 >= 0.70$ or

 $P_0 \le 0.617$ or $(P_1 \ge 0.889)$ and $P_2 \ge 0.111$) and $x_1 \ge 0.70$

Anomalies: (0)ANOMALY: run .\example_velreg_trace\Run_5 step 18:

action 0 with belief $P_0 = 0.869 P_1 = 0.110 P_2 = 0.021 --- Hellinger = 0.14$

(1)ANOMALY: run .\example_velreg_trace\Run_6 step 26:

action 0 with belief $P_0 = 0.865 P_1 = 0.109 P_2 = 0.026 --- Hellinger = 0.129$

Total Anomalies: 39/350

Giovanni Bagolin 30/11/2020

Secondo test: trovare anomalie in steps a velocità 0

(Not) Anomalies: (2)run .\example_velreg_trace\Run_7 step 22:

action 0 with belief $P_0 = 0.686 P_1 = 0.227 P_2 = 0.087 --- Hellinger = 0.03$

(3)run .\example_velreg_trace\Run_9 step 17:

action 0 with belief $P_0 = 0.691 P_1 = 0.217 P_2 = 0.092 --- Hellinger = 0.024$

Different action:

(6) run .\example_velreg_trace\Run_0 step 11:

action 1 with belief $P_0 = 0.315 P_1 = 0.318 P_2 = 0.368$

(27) run .\example_velreg_trace\Run_6 step 22:

action 1 with belief $P_0 = 0.089 P_1 = 0.410 P_2 = 0.501$

Terzo test: trovare anomalie in velocità [0,1]

Rule template: go at speed 0 or 1 if $P_2 >= x_1$ or

 $P_0 \le x_2 \text{ or } (P_1 \ge x_3 \text{ and } P_2 \ge x_4)$

Rule: go at speed 0 or 1 if $P_2 >= 0.071$ or

 $P_0 \le 0.733$ or $(P_1 \ge 0.887)$ and $P_2 \ge 0.071)$

Anomalies: (0)ANOMALY: run .\example_velreg_trace\Run_9 step 18:

action 1 with belief $P_0 = 0.879 P_1 = 0.103 P_2 = 0.018 --- Hellinger = 0.10$

(Not) (1)run .\example_velreg_trace\Run_5 step 19:

Anomalies: action 1 with belief P_0 = 0.872 P_1 = 0.107 P_2 = 0.021 --- Hellinger = 0.095

Total Anomalies: 7/350

Terzo test: trovare anomalie in steps a velocità [0,1]

(Not) Anomalies: (1)run .\example_velreg_trace\Run_5 step 19: action 1 with belief $P_0 = 0.872 \ P_1 = 0.107 \ P_2 = 0.021 --- Hellinger = 0.095$

Different action:

(5) run .\example_velreg_trace\Run_5 step 0: action 2 with belief P 0 = 0.335 P 1 = 0.331 P 2 = 0.334

(6) run .\example_velreg_trace\Run_9 step 12: action 2 with belief $P_0 = 0.678 P_1 = 0.228 P_2 = 0.094$

30/11/2020

Giovanni Bagolin

Quarto test: trovare anomalie in steps a velocità 1

Rule template: go at speed 1 if $P_0 >= x_1$ or

 $(P_1 \le x_2 \text{ and } P_2 \le x_3)$

Rule: go at speed 1 if $P_0 >= 0.986$ or

 $(P_1 \le 0.012 \text{ and } P_2 = 0)$

Anomalies: (0)ANOMALY: run .\example_velreg_trace\Run_9 step 22:

action 1 with belief $P_0 = 0.088 P_1 = 0.519 P_2 = 0.393 --- Hellinger =$

0.4855608923165748

(38)ANOMALY: run .\example_velreg_trace\Run_5 step 19: action 1 with belief

 $P_0 = 0.872 P_1 = 0.107 P_2 = 0.021 --- Hellinger = 0.10098772789613501$

Total Anomalies: 42/350