Team Effectiveness Report - Team3643 Reinforcement Learning Agent: (True online Sarsa(λ) - Topic 4)

Team Members: Aasish Tammana(1225545568), Akhilesh Udayashankar(1225622476), Prem Suresh Kumar(1225492151), Devadutt Sanka(1225362138)

Prem Suresh Kumar - 25%

Studied True online Sarsa(λ) and the differences between Q-learning and SARSA Coded True online Sarsa(\(\lambda\)) algorithm and performed Integration with project 4 Tested the Completeness and correctness of the code and Debugged corner cases. Create script for generating different environments Contributed to document the Introduction and Implementation part of the report

Akhilesh Udayashankar - 25%

Did Extensive research about True online Sarsa(λ) Implemented True online Sarsa(λ) and Integrated it with the pacman domain Learnt T-test and Anova along with their differences and finalized T-test Tested the Completeness and Debugged errors Contributed to document the Introduction and Implementation part of the report

Aasish Tammana - 25%

Researched the differences between Q-learning and SARSA Studied T-test and Anova and worked on the implementation of Student's T-test Created script for generating different environments and collected results of each environment Compare the performance of SARSA with the Q-learning agent and plotted graphs Contributed to document the Results, Analysis and Conclusion part of the report

Devadutt Sanka - 25%

Studied True online Sarsa(λ) and performed research on the algorithm Understand T-test and Anova differences Collect results for each environment for comparison Plotted graphs for comparison of the 2 algorithms and summarized the results for T-test Contributed to document the Results, Analysis and Conclusion part of the report

Signatures:

Prem Suresh Kumar Akhilesh Udayashankar

Devadutt Sanka

Teva Just

Aasish Tammana