

# The Following Folder Contains PDF Presentations for:

- RL\_Motivation
- RL\_Fundamentals - Bandits, MDP, Value Function, Bellman Equation
- RL\_PlanningAndDP - Dynamic Programming, Value Iteration, Policy Iteration (Policy Evaluation & Policy Improvement)
- RL\_ModelFreePrediction - MonteCarlo, TemporalDifference, TDLambda
- RL\_ModelFreeControl - Online SARSA, Offline Q Learning
- RL\_ModelBased - DYNA and Tree Search
- RL\_FunctionApproximation - Function approximation using Neural Network
- RL\_PolicyGradient - REINFORCE, Baseline Actor Critic
- RL\_CoreAlgorithms - PPO, Soft Actor Critic, DDPG
- RL\_VisualControl- DQN, DrQ-v2, Dreamer-v3
- RL\_SimulationsPart1\_HVS - From the Eye to V1 to Computer Graphics
- RL\_SimulationsPart2\_InAction - Current application of simulations: Domain Randomization and Domain Adaptation
- These presentations are intended to provide the reader with my personal interpretation and understanding of the various subject areas.
- All of this work was motivated by text, slides and lectures from: Richard Sutton, David Silver and Sergey Levine
- Updated / New material added: 6 / 25
- TODO: RL\_VisualRL - CNN Encoder, Auto Encoder, Contrastive Encoder
- TODO: RL\_Camera - Lessons learned from SupervisedLearning Generalization, Potential Sources of Brittleness in RL Deployment