CMPE 297-03 Reinforcement Learning

SJSU CMPE Department Spring 2020

When: Thursdays 6:00 – 8:45 pm

Where: DMH 358

Instructor: Jahan Ghofraniha, Ph.D.

http://www.nealdonnelly.com/brains/a-very-non-technical-explanation-of-how-alphago-zero-can-teach-itself-to-play-go-so-darn-well

The focus of this course is on reinforcement learning (RL) and deep reinforcement learning (DRL) as key areas in artificial intelligence field and their implementation using **Pytorch** and **Keras** frameworks. Topics include RL formalism, Markov decision process, **OpenAI Gym API** and PyTorch, Deep Q-Network (**DQN**), **DDQN** and **Rainbow** techniques.

If you are interested in AI-based game development, trading bots or business applications of AI such as customer service chatbots this is a course for you.

By taking this course you will learn about various RL algorithms and industry standard AI platforms and frameworks through homework assignments and implementation in the context of a final project.

Familiarity with Python and some knowledge of AI platforms will enhance your learning experience.