Course Logistics

Alina Vereshchaka

CSE4/510 Reinforcement Learning
Spring 2020

avereshc@buffalo.edu

January 27, 2020
Course: CSE4/510 Special Topic - Introduction to Reinforcement Learning

CSE510: Satisfy the depth requirement for the AI focus area

Instructor: Alina Vereshchaka

Session: Spring 2020

Lectures: Mon, Wed 11:00am - 12:20pm, Baldy 110

Office Hours (OH): Mon, Wed 12:30am - 2pm & by appointments

Teaching Assistant: Aman Johar - OH Tue, Thu 1pm - 3pm & by appointments
Prerequisites

- Python proficiency
- Basic probability and statistics
- Multivariate calculus and linear algebra
- Machine leaning or graduate-level AI-related course
- Loss functions, derivatives, gradient descent should be familiar
Reference Materials

- Lecture slides
- Papers and additional materials (will be added to the course website, as the course goes)
Students learn an enormous amount from each other as well as from us, the course staff, so Piazza is our main point of communication.

Please use Piazza for all questions related to lectures, assignments, project, quizzes and midterms.

All the lecture materials, including lecture slides, readings and news will appear at our course website at https://cse.buffalo.edu/~avereshc/rl_spring20.html.

Our schedule can be found here.

By appointment. Please send email to avereshc[at]buffalo.edu if it is urgent.
Evaluation

40% - Assignments [3 assignments: 15% + 15% + 10%]
20% - Final Project
10% - Short weekly quizzes
15% - Midterm 1
15% - Midterm 2
+ Bonuses
There are 3 assignments:

- Assignment 1 [15%] - Defining and solving RL environment [individual] (released by the end of the week)
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- Assignment 2 [15%] - DQN [individual]
Assignments [40%]

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- Assignment 1 [15%] - Defining and solving RL environment [individual] (released by the end of the week)
- Assignment 2 [15%] - DQN [individual]
- Assignment 3 [10%] - Policy gradient [individual]
Final Project [20%]

Open-ended project, can be done individually or in a team of up to two people

2% - Proposal
3% - Milestone
5% - Presentation
10% - Results + Final Report

+ Bonus Points: Poster participation during some of the following events:

- CDSE Days (more details) March 30 - April 3
- CSE Demo Days (more details)
- Other research events during the semester
Late Day Policy

- Students can use up to 5 free late days throughout the course that can be applied towards the assignments and/or a course project (some assignments may have a hard deadline).
- A late day extends the deadline by 24 hours.
- If there is more than 5 days after the deadline, a penalty of 25% for one day will be applied to any work submitted after that time.
- For the group work [course project] max late days left among teammates can be applied.
Quizzes [10%]

- Each quiz will contain 3-4 problems on topics covered that week
- At the end of a submission, the system will give you your final score
- Maximum three tries are allowed
- 11 quizzes in total, only 10 quizzes with the highest scores will be counted
- Released every Monday 9am, due by Sunday 11:59pm
- Three attempts are allowed, only the highest score will be kept
- Can be found on UBlearns > Assignments
- Quiz 0 will be released today, due by Sunday 11:59pm
Midterms [15% + 15%]

- Two non-cumulative midterms
- Most of the questions are multiple choice
- Midterms are closed-book and closed all devices
Bonuses

- Piazza Rockstar
- Jupyter Demo Time
- Candy Questions
- Other activities to be released as the course goes
- Academic integrity is a fundamental university value
- No collaboration, cheating, and plagiarism is allowed in projects, quizzes or the exam
- Those found violating academic integrity will get an immediate F in the course
- Please refer to the Academic Integrity Policy for more details
Jan 27 - Beginning of Classes

Feb 1 – Quiz 0 is due @11:59pm

Feb 3 - Project 1 is released

Feb 26 - Midterm 1 (subject to change)

May 6 - Last Day of Classes
In order to better know your expectations and background, please complete the anonymous survey at https://forms.gle/oiaP3g5MoHQdu2jn9

Have a great start of the semester!