EMERGENCY TA Job Posting: Fall 2021 APS1080: Introduction to Reinforcement Learning

This job is posted in accordance with the CUPE 3902 Unit 1 Collective Agreement.

Job Posting Date: July 26 2021
Application Deadline: August 6, 2021

Course Description:
Reinforcement Learning (RL) is a systems-level Artificial Intelligence toolset; this course will provide the student with both a solid theoretical foundation and a strong practical understanding of the subject.

RL enables autonomous agents to cope with poorly-characterized, novel environments by exploring the environment to gain knowledge about it, and to exploit this knowledge of the environment to act in a goal-directed manner. Although RL is positioned as one of three facets of Machine Learning, RL has far broader scope than the narrower tools of supervised and unsupervised learning. RL, being founded on agent design, has the goal of developing artificial intelligence schemes that can endow an agent with autonomy. This introduction, thus, will be presented within the motivating context of an overall AI system. There are three foundational RL tools we will cover (dynamic programming, Monte Carlo, Temporal-Difference Learning); we will also show how hybridizations of these foundational tools are employed to create production schemes. The student should leave the course with the ability to practically apply this AI toolset to novel problems.

This course is taught online.

2 positions Available – 50 Hours

Duties: developing solutions for assignments and tests, grading assignments and tests

Qualifications: very strong Python programming skills, knowledge of machine learning, linear algebra, calculus, probability, some knowledge of reinforcement learning and AI, must be able to TA online

Relevant criterion: Previous experience is the more relevant criterion than the need to acquire experience in respect of this posted position.

Rate of Pay: Current TA rates: U/G: $46.70 /hour; SGS I: $46.70 /hour; SGSII: $46.70 /hour

Date of Appointment: Sept 11 - Dec 18

Notes:
1. TA position and hours posted are tentative, pending final course determination and enrollment.
2. The Vice-Dean of Graduate Studies in the Faculty of Applied Science & Engineering has the sole authority to offer the above TA positions.
3. CUPE 3902 Unit 1 Collective Agreement is available at http://agreements.hrandequity.utoronto.ca.

To apply for a TA position, please submit cover letter and CV as a single PDF by filling out this form.

If the form is not working for you – please submit your application to David Duong, d.duong@utoronto.ca by August 6, 2021
The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission. The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities. If you require any accommodations at any point during the application and hiring process, please contact uoft.careers@utoronto.ca. During employment, to request accommodation from the University, contact the supervisor or department chair and/or Health & Wellbeing Programs & Services at hwb@utoronto.ca. For more information about accommodations at U of T, please visit our Accommodation webpage.

The hiring criteria for Teaching Assistant positions are academic qualifications, the need to acquire experience, previous experience and previous satisfactory employment under the provisions of this Collective Agreement.

Candidates who are members of Indigenous, Black, racialized and LGBTQ2S+ communities, persons with disabilities, and other equity seeking groups are encouraged to apply, and their lived experience shall be taken into consideration as applicable to the position.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.

This job is posted in accordance with the CUPE 3902 Unit 1 Collective Agreement.

The position(s) posted above is (are) tentative, pending final course determinations and enrolments.

Positions posted here are open to Graduate Students in the School of Graduate Studies, Postdoctoral Fellows and Undergraduate Students in the University of Toronto.
Preference in hiring shall be given to Graduate Students enrolled in the School of Graduate Studies of the University of Toronto or those who have made application to be enrolled in the School of Graduate Studies of the University of Toronto.