EMERGENCY TA Job Posting: APS1080: Introduction to Reinforcement Learning Fall 2023

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

Job Posting Date: August 9, 2023
Application Deadline: August 18, 2023

Schedule: ONLINE, Sept 16 - Dec 9, Saturdays 9-10:30am (synchronous delivery)

Estimated course enrollment: ~25

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.

1 Position available: 17 hours

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

Minimum Qualifications: has TA experience, able to TA online

Preferred Qualifications: very strong Python programming skills, knowledge of machine learning, linear algebra, calculus, probability, some knowledge of reinforcement learning and AI

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: $47.64/hour; SGS I: $47.64/hour; SGS II: $47.64/hour

For more information about this course, see https://gradstudies.engineering.utoronto.ca/professional-degrees/emphasis-in-analytics/

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 your application via this form (https://forms.office.com/r/7WBEWNjnnw). If this link does not work please email your application (CV and Resume as a SINGLE PDF FILE) directly to David Duong d.duong@utoronto.ca by August 18, 2023

If during the application and/or selection process you require accommodation due to a disability, please contact David Duong, d.duong@utoronto.ca

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, LGBTQ persons, and others who may contribute to the further diversification of ideas.

The University of Toronto invites all qualified applicants to make application.

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.

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.

All jobs are posted in accordance with the CUPE 3902 Unit 1 Collective Agreement. It is understood that some announcements of vacancies are tentative, pending final course determinations and enrollment.

Duties of this position shall be performed at the campus on which the position is located. Where the duties are intended to be performed at another location, such other location will be specified in the posting.

The Department's Hiring policy is available in the Department office and at the CUPE Local 3902 office.