University of Toronto AEROSPACE PROGRAMME Job Posting - Course Instructor Position Winter Term 2024 (January – April)

Posted on June 30, 2023

The Aerospace Programme seeks 1 Course Instructor for the following course:

ROB311H1S – ARTIFICIAL INTELLIGENCE

An introduction to the fundamental principles of artificial intelligence from a mathematical perspective. The course will trace the historical development of AI and describe key results in the field. Topics include the philosophy of AI, search methods in problem solving, knowledge representation and reasoning, logic, planning, and learning paradigms. A portion of the course will focus on ethical AI, embodied AI, and on the quest for artificial general intelligence.

Qualifications

An academic background in machine learning and computational/numerical methods studies is required. An undergraduate degree in a robotics discipline such as computer engineering, control and mechatronics, and graduate research in the area are also required.

Knowledge in artificial intelligence, robotics and mechatronics is a further requirement. Strong knowledge of robotic sensing, control, and spatial perception is required. Knowledge of engineering mathematics with emphasis on complex variables and ordinary differential equations.

Relevant Criterion

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

Duties

- Developing syllabus and preparing lectures.
- Teaching twice weekly: Thursdays, 14:00-16:00 and Fridays, 9:00-11:00.
- Conducting scheduled office hours for academic counselling of students.
- Leading tutorials or laboratories/practicals.
- Evaluation of tests and the final examination.

Duties of this position shall be performed at the campus on which the position is located.

Estimate of TA Support: 1 TA at 70 hours

Estimated Course Enrolment: 70 students

Rate of Pay: \$8,142.51 (per half course excludes vacation pay) or \$9,123.38 (per half course excludes vacation pay) if first CI appointment.

Application Process

Applicants should submit a cover letter, C.V. (including previous teaching evaluations (if applicable)), and a list of references by **July 24, 2023**. Applications should be sent to:

Carmela Versace, Manager

Institute for Aerospace Studies 4925 Dufferin Street Toronto, ON M3H 5T6 E-Mail: manager@utias.utoronto.ca

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 Course Instructors positions are academic qualifications, the need to acquire experience, previous teaching experience and previous satisfactory employment under the provisions of this Collective Agreement.

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.

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.

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.