Carleton UNIVERSITY Autonomous Space Robotics and Mechatronics Laboratory

Job Title:	Research Assistant	**Job Category:**	MASc/PhD Student
Laboratory:	Autonomous Space Robotics and Mechatronics Lab	**Travel Required:**	No
Supervisor	Professor Robin Chhabra	**Duration:**	2/4 years

Job Description

The Autonomous Space Robotics and Mechatronics Laboratory (ASRoM-Lab) at Carleton University invites highly qualified candidates to apply for multiple PhD and MASc positions. The candidates will work in the general area of space robotics and mechatronics with the focus on autonomous and intelligent guidance, navigation and control technologies. All of the positions commence from or shortly after September 2020 and are subject to full financial support for up to four years (PhD) or two years (MASc), conditional to excellent performance of the candidate.

About ASRoM-Lab:

ASRoM-Lab is a graduate research laboratory in the Department of Mechanical and Aerospace Engineering, Carleton University, whose primary focus is the development of advanced guidance, navigation and control strategies for next-generation space robotic and mechatronic systems. Algorithms and methodologies based on artificial intelligence and geometric mechanics are deployed as promising approaches to particularly study the response of space systems in the presence of off-nominal conditions appearing in space missions. Such frameworks are advantageous, since they offer synergistic integration of mechanical, electrical and computer subsystems, high-fidelity modelling and estimation, alongside effective controllers to remediate off-nominal conditions and help with the long-term autonomy of future space systems operating in hostile and uncertain environments.

Eligibility:

Applicants should have or are expected to complete their undergraduate or master's degree with very high academic standing by September 1, 2020 in Mechanical/Aerospace/Electrical Engineering with exposure to advanced controls and robotics/mechatronics. Highly qualified candidates with strong backgrounds in geometric mechanics and control, computational neuroscience and artificial intelligence or related fields are also encouraged to apply especially if they have experience working with robotic systems. Candidates must be self-motivated and committed to excellence in research, and demonstrate strong interpersonal and written/oral language skills. The successful candidates will be expected to perform research in collaboration with a team of faculty members and industry partners.

How to Apply:

To ensure full consideration, please send an email with a subject line including the degree that you are applying (have applied) for and the area that you are interested in. In the body of the email, explicitly mention your name, start date, whether you are a domestic or international student, and you have already applied to Carleton University. Attach your complete CV, transcript(s) and a sample of your writing in a single PDF file.

Submit your inquiries and application packages directly to Professor Robin Chhabra at: robin.chhabra@carleton.ca.