

MDA Corporation

PLEASE READ THE JOB DESCRIPTION AND THE PRE-EVENT VIDEO INTRODUCTION QUESTIONS BELOW BEFORE PAYING FOR YOUR VIDEO PROCESSING FEE

Please review the job details below. The MDA facility in Brampton, Ontario has supported human spaceflight for the past 30+ years through the design and operational support of space robotics systems such as Canadarm on the Space Shuttle, and Canadarm2 and Dextre on the International Space Station. In addition, this site develops rover technology for Mars missions, space-borne sensors for planetary exploration missions, as well as a multitude of terrestrial spin-offs for medical robotics and nuclear power plant operations. MDA is currently exploring future opportunities in areas such as AI-based robotics for Lunar Gateway (the next international space station, which will orbit the moon), on-orbit satellite servicing, and next-generation space missions.

Structural Engineer

Collaborate with a multi-disciplinary engineering team to develop state-of-the-art robotics. Be part of a design team to evaluate, numerically, analytically and/or experimentally, stiffness, strength and durability of the structure of our robotic, nuclear and medical products. Size components, identify problem areas, propose design modification or improvement and subsequently approve the mechanical design. Support manufacturing, and validate and prove the mechanical design by conducting mechanical tests on the product hardware according to the mechanical loading environment. Generate analysis reports and create mechanical test plans and reports.

The candidate should meet the following requirements:

- 1) 3-5 years direct experience on structural dynamics (modal analysis, SINE and Random vibration and Acoustic excitation)
- 2) Experience in impact of different mechanical loading conditions (QS, Dynamic and thermal stress) on mechanical design
- 3) Familiarity with NASTRAN/NX CAD & CAE tools
- 4) Investigate problems/failures during development and test
- 5) Ability to work within a team of structural engineers

- 6) Multi-tasking and task-prioritizing capability
- 7) Knowledge and understanding of mechanical design
- 8) Ability of working under tight schedule and pressure
- 9) Experience in a major CAD tool (such as NX, Pro-E or Catia) is an asset
- 10) Experience and knowledge in fatigue and shock are an asset
- 11) Understanding spacecraft requirement is an asset

Education

B.Sc. or the equivalent in Mechanical Engineering. M.Sc. preferred.

Excellent verbal, written communication skills are essential to this position.

All candidates must be able to obtain CGP and ITAR clearance.

MacDonald, Dettwiler and Associates Inc. is an equal opportunity employer committed to promoting diversity in the workplace.

With respects to Accessibilities for Ontarians with Disabilities Act, MacDonald, Dettwiler and Associates Inc. is proud to provide accommodation(s) during the recruitment process. Should you require any accommodations, please feel free to notify us.

PRE-EVENT VIDEO INTRODUCTION QUESTIONS:

- 1) Please tell me about yourself.
- 2) What makes you the best choice for this position?
- 3) Tell me about a specific time when those with whom you were working could not agree upon the course of action. How did you approach the situation?

If you meet the requirements and your skills are a good match, then proceed to register and pay for your video processing fee.

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