MDA Corporation

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

Engineer, Vision Systems and Machine Learning
Location: Brampton, Ontario

- 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. The site is currently seeking Engineers for Guidance, Navigation and Controls Department.

Position Detail:
MDA is currently seeking an **Intermediate Engineer or an Engineer to work in the Dynamics and Controls Group. As an Engineer, the suitable candidate may work on Gateway program, on planetary rovers program, in L&SE program (to support On-Orbit Space Station activities), in the nuclear program (to support Bruce Power), and R&D activities.**

The daily duties will include:

- Mobile robot autonomous navigation on GPS denied environments
- Visual servo control implementation
- Performing top down error budget allocations to subsystem components starting from system level error budget specifications
- Deriving Space Robotics System Requirements Performing simulation runs to analyze failures and recovery scenarios
- Mathematical modelling of rigid/flexible payloads using the in-house developed simulator
- Tuning of the control system parameters of the manipulators to meet the performance objectives required for the On-Orbit tasks
- Contributing to technology development (R&D activities)
- Present analysis results to Technical Leads, Program management, Canadian Space Agency, ESA and NASA
- Other tasks as required

Qualifications and Experience:
Interested candidates must possess a Master's degree in Computer Systems Engineering, Aerospace, Mechanical, or Electrical. Candidate should have 6 years of hands on experience in advanced computer vision for rover navigation in unknown and rugged terrains and algorithm implementation. An experience on Mobile Robot Autonomous Navigation is an asset. The candidate must have demonstrated the ability to work in a team environment.
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.

MDA is proud to provide accommodations during the recruitment and selection process. If you require accessible formats, communication supports or any other form of accommodation, please notify MDA if you are contacted for an interview.

Competitive Compensation and Benefits Package
MDA provides competitive compensation and benefits packages for its employees at its many locations. As a member of the MDA team, you and your qualified dependents are eligible to participate in a benefit plan that ensures a comprehensive level of protection for employees and their families through health care plans, disability income protection, life insurance, and other employee benefits. The Company's retirement plans encourage employees to save for their future

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?

Registration is now closed