

Job Posting: Software Engineer

(MCSS.1903)

About Us

Mission Control is a space exploration and robotics company focused on mission operations, onboard autonomy and artificial intelligence. Mission Control specializes in software for operating robotic assets deployed in harsh and remote environments like Mars or the Moon, as well as here on Earth. Our technology improves the safety, efficiency, productivity, and scientific return of robotic missions. We believe in sustainable exploration and inspiring the next generation to always keep exploring.

Please visit our website to learn more about our team and ongoing projects:

<https://missioncontrolspaceservices.com>.

Mission Control has a clear vision: to be a workplace where a diverse and thoughtful mix of talented people want to learn and do their best work. Diversity and inclusion are priorities for our company, and we believe in creating a team that reflects these foundational principles.

About the Job

Mission Control is seeking enthusiastic candidates for the position of Software Engineer to play a key role in the full product lifecycle for software for commercial space exploration missions. We're looking to grow our software team to ramp up development of our Mission Control Software and we are looking for candidates who are passionate about space exploration and robotics who want to contribute to growing a small company from the ground up (literally and figuratively)! You will be exposed to a wide variety of tasks with abrupt changes to deadlines and scope, so applicants must be versatile self-starters who work well in teams and aren't afraid to learn something new and get outdoors to test your code on our robots (probably in a desert somewhere).

Primary Responsibilities

Under the guidance of our Chief Technology Officer, your primary responsibilities will include:

- Creating full stack of space robotic software, from the lowest level real-time firmware to high-level autonomy, and from ground station communications networks to high-fidelity simulations and data visualization (C, C++, TypeScript);
- Taking a technical leadership role in ground and flight segment software development cycle from requirements definition, R&D, prototyping, flight development, V&V and flight operations;
- Performing code reviews and testing to ensure software quality is high and requirements are met;
- Conducting research and development activities and keeping up with state-of-the-art techniques in your field of expertise;
- Implementing perception, localization, control and machine learning algorithms for embedded and cloud computing platforms;
- Diagnosing and repairing technical issues with a robot in the lab or in an outdoor environment;
- Contributing to our office culture with a positive and start-up-oriented attitude— we have a collegial team with a wide range of hobbies and interests.

Additional tasks may include:

- Presenting results to customer and partnering organizations;
- Developing and proposing concepts to potential customers.

Skills and Experience

Bonus points for:

- Experience or demonstrated interest in machine vision, machine learning and/or deep learning and associated libraries;
- Experience or demonstrated interest in developing software operating on real-time and distributed systems, particularly on ground segment software and data handling for space systems or embedded software operating on space systems;
- Past hands-on experience or demonstrated interest in mobile robotics (e.g. UGVs, UAVs) and sensor hardware (e.g. stereo cameras, IMU, LiDAR);
- Experience or demonstrated interest in front end and user experience design;
- Experience or demonstrated interest in virtual reality, mixed reality and augmented reality systems.

Location

- Mission Control is located in Ottawa, Ontario.
- Some travel may be required at certain times for this role.

What's in it for you?

- Be on the forefront of space exploration and the emerging commercial space industry
- Work to solve problems with a team of intelligent, fun people!
- Health/Vision/Dental benefits included
- Employee Stock Option plan for equity sharing
- Flexible working hours
- Work in a respectful and inclusive workplace. It is extremely important to us that all employees feel safe and supported at work.

How to Apply

Please send your application materials to hr@missioncontrolspaceservices.com. Include "Software Engineer" in the subject line. Application materials include:

- Cover letter and resume as a single PDF (required)
- Portfolio material, references, or other indications of exceptional past work (optional)
- As part of our commitment to an inclusive work environment, we accept and encourage anonymized resumes

We will accept applications until the position is filled. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, age, or veteran status.