

**Winter 2022** internship opportunity:

## R&D Intern

**Wyvern is making something big.** Our vision is to provide actionable intelligence from space, anywhere in the solar system. To achieve this we need to entirely reimagine how satellite Earth observation is done.

We're a rapidly growing space company in Western Canada, powered by humans passionate about space and dedicated to excellence. If you're excited by the prospect of creating a step increase in the capability of Earth imaging cubesats, we want you on our team.

We're looking for a broadly capable undergraduate student to work with our research and development (R&D) team for 16 weeks.

### Who you are

- You have a strong foundation of mathematics and physics, and can ground what you learn in basic principles.
- You have holistic knowledge of many areas of engineering, or are excited to learn about things outside your main area of expertise. Bonus if you have systems engineering or mechatronics experience.
- You can explain technical concepts about your work to non-technical people and keep them engaged as you explain.
- You have experience utilizing and interfacing with electronic hardware (microcontrollers, computers, DAQs, etc.) to monitor and control instruments.
- You have experience with hardware implementation of control systems, and know the basics of PID control.
- You have experience with imaging systems or are willing to learn about them.
- You are familiar with hardware for space, vacuum and/or similar harsh environments.
- You are involved in extracurricular team projects that challenge your technical skills (ex. hackathons, robotics club, etc.).
- You work well independently but know when to ask for support.

### What you will be doing

As an R&D intern you will apply your holistic knowledge to many areas on the R&D team, including:

- Supporting our Controls Engineer with the design of a complex control system:
  - a. Reviewing hardware requirements to determine if a control algorithm is feasible in practice,
  - b. Acquiring appropriate hardware and setting it up in the lab,
  - c. Design testing procedures for the control system,
  - d. Running tests of various control algorithms on hardware,
  - e. Iterating the design of the control system hardware as needed,



- Support data acquisition during in-lab testing of deployable structures,
- Support implementation of a telescope test procedure, involving system level optical, tests,
- Support with designing supports and packaging to enable field-tests of the system, and others.

Ultimately, you will work closely with our R&D team to help build a prototype of our novel telescope.

**For this position, you must:**

- You must be enrolled in an undergraduate program at a Canadian university.
- Wyvern requests that all employees are fully vaccinated against COVID-19.

Engineering Physics, experimental Physics, Mechatronics, or Electrical Engineering students are preferred, but students in other programs will still be considered if experience is aligned with this role.

## What to expect from Wyvern

- We have a startup culture. While this position is full-time, working hours are flexible.
- Some in-person work in our downtown Edmonton lab will be required.
- We're small but rapidly growing. You'll see what it's like to work in a startup.
- This is a 16-week position beginning in January 2022; the exact start date is TBD.
- Compensation will be around \$20.00 CAD/hour depending on qualifications.

Apply via your campus job board or Internship office, or by submitting a resume and cover letter to [hire@wyvern.space](mailto:hire@wyvern.space).