Honeywell | Aerospace

HONEYWELL AEROSPACE INTERNSHIP OPPORTUNITIES FOR TEPS TRAINEES:

Engineering Intern-Ottawa, ON-00328771

Honeywell Aerospace is currently developing engineering models for potential Canadian contributions to NASA's WFIRST mission. The Wide Field Infrared Survey Telescope is a space telescope designed to perform a wide field survey of the near-infrared sky. The mission uses a repurposed 2.4 m telescope equipped with a wide field instrument (WFI) and a coronagraphic instrument (CGI) in order to enable a comprehensive observing program that will make major contributions towards all three of the goals identified for astrophysics in the most recent US decadal review of astronomy, namely: 1) Probe the origin and destiny of our universe, including the nature of black holes, dark energy, dark matter and gravity. 2) Explore the origin and evolution of the galaxies, stars and planets that make up our universe and 3) Discover and study planets around other stars, and explore whether they could harbour life.

The Canadian astronomy community has determined that the WFIRST mission and its deep wide survey of the sky is of great interest and has decided to participate in the WFIRST mission in a meaningful way, both scientifically and technically. The potential Canadian contributions to WFIRST will be to either the integral field spectrograph instrument or the relative calibration system, one or both of which will fly as part of the Wide Field Instrument on this mission sometime in 2024. To this end the Canadian Space Agency has funded projects to define these contributions in more detail and to develop the technologies which enable them. Honeywell is CSA's industrial partner leading these studies and technology developments.

The position will be based at Honeywell Aerospace in Ottawa Canada. The term of the internship can be flexible with at least a 4 month duration.

Responsibilities:

The internship holder will participate in the technology development aspects of these potential contributions which may include one or more of the following activities:

- Design, specification, assembly and test of actuated mirror assemblies
- Design, specification, assembly and test of fibre-optic couplers
- Design, specification, assembly and test of fibre fed projection optics
- System level assembly and test, including the characterization of large format infrared detectors.

The candidate will be expected to make extensive use of our design tools and our well equipped optical test laboratory to accomplish these tasks.

The intern will gain valuable experience in instrumentation development and experience in the development of technologies for use in space according to the processes of the Canadian Space Agency. The intern will be expected to plan and report on his/her technology development activities in a form suitable for formal project reporting to our customer. This will include inputs to reports and presentations, with opportunities to directly present the intern's work to our customer. Guidance will be available at all times from members of our senior staff.

Basic Qualifications:

- Currently enrolled in the TEPS Program.

Additional Qualifications:

- Familiarity with optical design and testing is an Asset
- Willingness to learn aspects of astronomical instrument design is essential.

The Honeywell building is a controlled goods program environment. Candidates must be eligible for CGP clearance.

Interested interns should submit a letter of reference, a CV, transcripts, and a 1-page statement that discusses (1) why they would like to intern at HONEYWELL and (2) how the internship supplements or enhances their research. Please submit by March 21, 2017 to teps@yorku.ca

As an Equal Opportunity Employer, Honeywell is committed to a diverse workforce.