



# Indigenous.Link

Canada's fastest growing Indigenous career portal, Careers.Indigenous.Link is pleased to introduce a new approach to job searching for Indigenous Job Seekers of Canada. Careers.Indigenous.Link brings simplicity, value, and functionality to the world of Canadian online job boards.

Through our partnership with Indigenous.Links Diversity Recruitment Program, we post jobs for Canada's largest corporations and government departments. With our vertical job search engine technology, Indigenous Job Seekers can search thousands of Indigenous-specific jobs in just about every industry, city, province and postal code.

Careers.Indigenous.Link offers the hottest job listings from some of the nation's top employers, and we will continue to add services and enhance functionality ensuring a more effective job search. For example, during a search, job seekers have the ability to roll over any job listing and read a brief description of the position to determine if the job is exactly what they're searching for. This practical feature allows job seekers to only research jobs relevant to their search. By including elements like this, Careers.Indigenous.Link can help reduce the time it takes to find and apply for the best, available jobs.

The team behind Indigenous.Link is dedicated to connecting Indigenous Peoples of Canada with great jobs along with the most time and cost-effective, career-advancing resources. It is our mission to develop and maintain a website where people can go to work!

Contact us to find out more about how to become a Site Sponsor.

Corporate Headquarters:

Toll Free Phone: (866) 225-9067

Toll Free Fax: (877) 825-7564

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# Job Board Posting



Careers.Indigenous.Link

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## Research Officer, Detect and Avoid

<b>Job ID</b>	<b>14-BF-C5-75-84-12</b>	
<b>Web Address</b>	<a href="https://careers.indigenous.link/viewjob?jobname=14-BF-C5-75-84-12">https://careers.indigenous.link/viewjob?jobname=14-BF-C5-75-84-12</a>	
<b>Company</b>	National Research Council Canada	
<b>Location</b>	Ottawa, Ontario	
<b>Date Posted</b>	From: 2019-04-12	To: 2019-05-29
<b>Job</b>	Type: Full-time	Category: Miscellaneous
<b>Job Salary</b>	\$52,854 To \$149,416 Per Annum	
<b>Languages</b>	English	

### Description

The NRC Advantage

GREAT MINDS. ONE GOAL. CANADA'S SUCCESS.

The National Research Council of Canada represents a powerful partnering option for anyone looking to push the boundaries of science and industry. In fact, as the Government of Canada's largest research organization supporting industrial innovation, the advancement of knowledge and technology development, we have become catalysts for innovation. For over a hundred years, the impact of our work with industry leaders and other government bodies has shaped Canada's future. We partner with some of the most creative and solutions-driven minds in the world. And now, we want to partner with you. Be part of our collective force to come up with potentially disruptive solutions to Canada's current and future technology challenges. Let your expertise and inspirations make an impact by joining the NRC.

Your Challenge

Help bring research to life and drive your career forward with the National Research Council of Canada (NRC), Canada's largest research and technology organization.

We are looking for a vibrant and dynamic Research Officer, Detect and Avoid to support our Aerospace Research Centre. This person would be someone who shares our core values of Integrity, Excellence, Respect and Creativity. The primary responsibility of the Research Officer, Detect and Avoid (RO) is to support the goals of NRC and the Aerospace Research Centre through research of international calibre and the development and application of advanced technologies. The incumbent works in a team environment with researchers and technical experts in world-class facilities. Activities also include the development of proposals for new research initiatives, project management, and providing service to NRC clients. The Research Officer provides input into the overall direction and research priorities for the program area within the context of the NRC Aerospace Research Centre business plan.

The NRC Aerospace Research Centre is actively investing in collaborative research focused on autonomous, optionally-piloted and remotely piloted aircraft. A key focus area within this domain is the development and demonstration of a Detect and Avoid system. This system will be capable of detecting and tracking other aircraft (co-operative and non-cooperative) and ground based obstacles at sufficient range and integrity to determine if there is a threat of collision, and select/design an "escape maneuver" to avoid collision. NRC seeks a Research Officer to support the continuing development and flight test demonstration of this Detect and Avoid system.

As part of the duties of this position, the Research Officer is to advance technology in all aspects of the Detect and Avoid problem, including sensor selection and configuration, target detection/tracking/threat classification algorithms, and display symbology to assist in successful resolution of traffic conflict situations by a pilot or auto-pilot.

Periodic flight test evaluation of prototype sensors and algorithms is required. It is expected that the incumbent will participate in the design and conduct of these flight tests as a crew-member on board NRC's experimental aircraft. This position will appeal to a person who is well organized, who is detail-oriented, who is creative and who enjoys working as part of a team to deliver excellent client service. If you're that person, then this is the perfect role for you!

In joining our team, you will enjoy a wide-range of benefits including comprehensive health and dental plans, pension

and insurance plans, vacation and other leave entitlements.

#### Remarkable Work Environment

We believe in fostering workplace that is accommodating, respectful, welcoming and inclusive, which prioritizes the health and safety of employees.

NRC values diversity in our workforce. We encourage candidates and employees to self-identify as members of the following designated groups: women, visible minorities, Aboriginal peoples and persons with disabilities. Our workplace embraces the wide variety of ages, genders, faiths, ethnicities, languages, abilities, and areas of specializations of our employees. We recognize that diversity opens the doors to new ways of thinking, leading to greater creativity and innovation.

NRC is committed to maintaining a safe and healthy work environment. We encourage good health practices, strive to identify and eliminate hazards, while promoting a positive safety culture through a variety of initiatives to ensure employee well-being.

To know more about the NRC and the advantage, please click on the following link:

<https://nrc.canada.ca/en/corporate/careers/nrc-advantage>

#### Relocation

Relocation assistance will be determined in accordance with the NRC's directives.

#### Salary Range

This position is classified as a Research Officer (RO), a group that is unique to the NRC. The RO group uses a person-based classification system instead of the more common duties-based classification system. Candidates are remunerated based on their expertise, skill, outcomes and impacts of their previous work experience. The salary scale for this group is vast, from \$52,854 to \$149,416 per annum, which permits for employees of all levels from new graduates to world renowned experts to be fairly compensated for their contributions.

#### Experience

Significant experience in both hardware and software aspects of sensors for distant target detection i.e.: from Lidar, radar or camera, sensor data acquisition and processing (both off-line and real-time) to target tracking and performance analysis;

• Experience in combining multiple sensor sources (sensor fusion) to improve tracking performance;

• Basic experience with development or modification of aircraft display symbology;

• Experience in the full spectrum of research activities including identification of research requirements, proposal writing, project management, data production and analysis, and reporting through written documentation, presentations and publishing;

• Experience in experimental design and analysis including data collection and analysis, overseeing data production, and ensuring data quality;

• Experience in working in multi-disciplinary teams; and

• Basic experience with aircraft dynamics and the flight test environment; UAV experience is considered an asset.

#### Education Requirements

PhD or Master's Degree in Engineering, Applied Science, Computer Science or Robotics.

We are looking for candidates with a specialization in Lidar, radar or optical technologies for target detection and tracking.

#### Essential Skills

##### Technical Competencies

• Knowledge of MATLAB;

• Knowledge of Programming Languages (C, C++);

• Ability to select, define and implement sensor processing, target detection and target tracking algorithms; and

• Knowledge of OpenCV is considered an asset.

#### Work Environment

##### Condition of Employment

Secret (II). A Secret clearance must be obtained within 12 months of employment.

The incumbent will be able to travel on deployments. He/she must be able to fly as aircrew on-board experimental aircraft and be able to access system locations (i.e., confined and/or high places) on aircraft.

## **Additional Skills**

### **Behavioural Competencies**

• Research - Creative thinking (Level 3)

• Research - Communication (Level 2)

• Research - Networking (Level 2)

• Research - Results orientation (Level 2)

• Research - Teamwork (Level 2)

## **Other**

### **Notes**

• A pre-qualified list may be established for similar positions for a one year period.

• This position is being advertised internally and externally simultaneously, however first consideration will be given to internal NRC applicants.

• In order to ensure a prompt and efficient processing of applications, candidates are encouraged to provide, along with their résumé, a detailed covering letter explaining how they meet each of the requirements of this position (education, experience, language requirements) by providing concrete examples. In addition, the candidate is encouraged to describe in detail when, where and how he/she gained the experience.

• Overtime may sometimes be required.

• Some travelling may be required.

• NRC employees enjoy a wide-range of benefits including comprehensive health and dental plans, pension and insurance plans, vacation and other leave entitlements.

• Preference will be given to Canadian Citizens and Permanent Residents of Canada. Please include citizenship information in your application.

• The incumbent must adhere to safe workplace practices at all times.

As an employer who values diversity in its workforce, we encourage candidates to self-identify as members of the following designated groups: women, visible minorities, aboriginal peoples and persons with disabilities. Measures for accommodation are available to all candidates retained for further assessment.

## **How to Apply**

Please direct your questions, with the requisition number (6471) to:

E-mail: NRC.NRCHiring-EmbaucheCNRC.CNRC@nrc-cnrc.gc.ca

Telephone: 450-641-5132

Closing Date: 29 May 2019 - 23:59 Eastern Time

To apply please select "Click for Details" below