

The **University of Saskatchewan** is the headquarters for the **Canadian SuperDARN, Super Dual Aurora Radar Network**, program. SuperDARN is an international collaboration involving 9 principal countries and more than 25 radar systems installed around the world. The Canadian SuperDARN program is a key partner in the international collaboration. Canada's strong technical team is currently responsible for the operation of four SuperDARN radar systems. These radars are located at Saskatoon, SK; Prince George, BC; Rankin Inlet, NU; and Inuvik, NT. A fifth additional system is under development for installation at Clyde River, NU. The radar systems located at **Rankin Inlet, Inuvik and Clyde River** are unique in their geographic location, by providing coverage over the majority of the polar cap, and they are collectively known as **PolarDARN**.

## **PolarDARN - Radar Engineer**

### **Job Description**

There is a requirement for a radar engineer within the PolarDARN program. The main duties will relate to assisting the system engineer with the **development of radar operating system components**, as well as sub-system firmware as needed for hardware integration and radar operation. Due to the complexity of the radar system, the individual will also be required to **work with and develop a thorough understanding of the electronic sub-systems** integrated in the complete instrument. The individual must be able to communicate scientific and technical details to the stakeholders. The individual must also be able to offer creative solutions, including complete and workable deliverables. The individual will be required to identify and prioritise potential development areas, while working both independently and within a team environment. Multitasking will be required to provide support in a diverse project environment, while maintaining an organised program. Part of the responsibilities will include occasional travel to the radar sites for system installation, upgrades and maintenance.

### **Minimum Requirements**

The successful candidate will hold an engineering degree in one of the following disciplines: engineering physics, electrical engineering or computer engineering. **Electronic circuit design and analysis skills**, along with a working experience of RF test and measurement equipment is essential. The candidate must also have a **working knowledge of UNIX-based** computer operating systems.

### **Advantages**

Advanced knowledge of UNIX-based computer operating systems, experience with C programming and a knowledge of IT are of advantage to the candidate. Familiarity with antenna and transmitter/receiver design in the HF band, and knowledge of broadband RF modem systems are also desired.

### **Salary**

Salary will be commensurate with experience, in the target range of \$60,000 - \$80,000 CAD per year.

### **Term**

The initial requirement will be a full-time position with a 2 year renewable term, based on performance.

**Applications** should be sent by mail or electronically to:

Prof Jean-Pierre St-Maurice  
c/o Cindy Jelinski (Administrative Assistant)  
Institute of Space and Atmospheric Studies  
University of Saskatchewan  
116 Science Place – Room 254  
Saskatoon SK S7N 5E2  
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**Email:** [cindy.jelinski@usask.ca](mailto:cindy.jelinski@usask.ca)

This job opportunity will be open until the position is filled.