



# Hemisphere GNSS

**Job Title:** Positioning Algorithms Engineer  
**Location:** Calgary, AB  
**Department:** Engineering  
**Reports To:** GNSS Engineering Manager

To Apply send your resume to: [Aebert@hgns.com](mailto:Aebert@hgns.com) or [HR@hgns.com](mailto:HR@hgns.com)

Full-Time     Part-Time /     Exempt     Non-Exempt

## Summary

As part of the Advanced Algorithms Group, the GNSS SW Developer will deliver state-of-art Real Time Kinematic (RTK) and Precise Point Positioning (PPP) algorithms and software that are critical to all Hemisphere GNSS products.

## Essential Duties and Responsibilities

- Research, develop, simulate, implement, and test innovative ideas to improve Hemisphere's RTK and PPP algorithms
- Develop complex software in C, C++, MatLab, or other selected languages in accordance with applicable software development methodology and release processes
- Test and improve code quality
- Provide reliable solutions to a variety of problems using sound problem solving techniques
- Problem investigation, root cause analysis, and corrective actions
- Work collaboratively and professionally with other associates in cross functional teams to achieve goals
- Participate in the creation of publishing material such as white papers
- Attend technical conferences on behalf of the company when necessary
- Present technical papers at conferences when necessary
- Maintain company quality standards
- Other duties as assigned
- Minimal travel required (5%)

## Supervisory Responsibilities

- This position will not supervise direct reports

## Education and/or Work Experience Requirements

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

## Education and/or Experience

- Ph.D. or M.Sc. in Engineering, Mathematics, or related field Experience
- 5+ years experience developing RTK, PPP, or related precision positioning technologies
- 5+ years experience in embedded software development
- 5+ years experience working in a team environment using a software version control system
- 5+ years experience in hands-on development and troubleshooting on embedded targets

## Practical/Technical Skills

- Proven experience in embedded systems design with pre-emptive, multitasking real-time operating systems
- Familiarity with GNSS systems and concepts is required



### **Computer Skills**

- 5+ years experience with strong programming experience in C and C++ in an embedded systems context
- Experience with C# in a desktop application context is also preferred
- Proficient skill level in Microsoft Office Suite – Word, Outlook, PowerPoint and Excel
- Internet search processes and research abilities

### **Certificates, Licenses, Registrations**

- N/A

### **Language Skills**

- Excellent English verbal and written communication skills, including ability to effectively communicate with internal and external customers
- Ability to effectively present information to customers, clients, management, board of directors and other employees of the Company in small group situations, public groups, and/or one on one

### **Reasoning Ability**

- Ability to define problems, collect data, establish facts, and draw valid conclusions
- Ability to read, analyze, and interpret advanced scientific and technical journals and to respond to common inquiries or complaints from customers or regulatory agencies
- Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables
- Ability to write technical documentation in a clear and concise manner

### **Other Skills and Abilities**

- Excellent attention to detail
- Ability to work well within a team
- Must be able to work under pressure and meet deadlines, while maintaining a positive attitude and providing exemplary customer service
- Ability to work independently and to carry out assignments to completion within parameters of instructions given, prescribed routines, and standard accepted practices
- Ability to handle high level of confidentiality regarding product information
- Excellent planning, time management, communication, and decision-making skills
- Ability to work with minimal supervision
- Must be flexible and have the ability to adapt to a changing environment
- Strong organizational skills with ability to prioritize tasks as appropriate