



IF INTERESTED PLEASE SEND YOUR RESUME TO
HR@HGSS.COM

GNSS Software Engineer

Assist in the development, production and commercialization of new as well as the refreshing and extension of existing Hemisphere GNSS embedded product firmware and desktop application software to support the Company's GNSS-related new product development. Responsibilities require application of advanced knowledge of GNSS navigation systems, techniques, technologies and applications (including general theory, differential GNSS positioning algorithms, technological limitations); computational system design; software development, design and programming; printed circuit board design; microcontroller interfacing; and electronic communication (e.g., RF) technologies and principles in order to:

- Engineer innovative new guidance, display mapping, system control, user interface communication, driver control and interface, digital signal processing, database management and data logging firmware and application software.
- Assist in the management of version control and automated build systems, as well as compiler and build script infrastructure.
- Develop and enhance GNSS firmware capabilities relating to various communication interfaces, such as CAN bus, Bluetooth, and TCP/IP networking over Ethernet and Wi-Fi.
- Develop and enhance low-level capabilities for GNSS firmware platforms such as adding to the features or stability of the Real-Time Operating System (RTOS), or diagnostic capabilities related to profiling and debugging.
- Engineer new methods of interfacing and combining both Company firmware and hardware to improve existing products and develop new products.
- Engineer new or enhanced GNSS positioning receiver hardware embedded control modules and systems to interface with and apply software developed in order to achieve superior product accuracy, reliability, robustness and usability.



- Engineer embedded software technologies that will help improve receiver signal reception, processing and tracking of satellite-based augmentation systems (SBAS), real time kinematic (RTK) and other ionosphere-free solutions that will also drive product capability development towards sub-centimeter level positioning accuracy.
- Engineer new or improved firmware and application test plans, processes and procedures that will allow the quantification and tracking of new product performance in accordance with accepted statistical metrics.
- Coordinate the generation of design documentation.
- Perform virtual laboratory simulation as well as field testing of new or improved embedded firmware, applications and systems developed.
- Perform department technical liaison with other Company cross-functional groups as well as OEM customers on issues of Hemisphere GNSS firmware and software application design, specification, engineering development and production release to help drive product development from initial concept design stage through to final product release, as well as to resolve post-release operational concerns.
- Contribute to the Company's intellectual property holdings through the investigation of potential new product concepts and features, development of creative new ideas and submission of patent applications.

Requirements:

Bachelor's degree in Computer Engineering or Electrical Engineering as well as 2 years of experience with the development of embedded firmware and desktop application software to support GNSS-based navigation products, including development of digital signal processing firmware, driver controls and interfaces, user interfaces, as well as database management and data logging applications.