



POSITION AVAILABLE

Salary Grade:

Req: E00008

Honeybee Robotics (HBR) is a leader in advanced robotic systems for the worlds' toughest environments. We are an R&D engineering company that builds unique solutions for our customers' challenges, on Earth and in space.

HBR seeks a **Software Engineer** to support robotics and measurement software systems development for the fabrication of prototype sample acquisition and handling devices used in planetary exploration, reporting directly to the **Vice President of ETG** and reside in the **Pasadena, CA** area. The position presents the opportunity to work in a fast-paced multidisciplinary environment where you will create a wide variety of systems including networked control frameworks, embedded software applications, motion control systems, and data acquisition software for our mechanisms.

Responsibilities:

- Develop and maintain robotic control and measurement software systems for both PCs and embedded systems
- Contribute to in-house software architecture improvement projects
- Perform testing and validation on robotics software and control systems
- Manage software field deployments and provide support on-site or remotely to customers
- Deriving and owning software system requirements and schedules
- Contributing to planetary exploration research and development efforts

Requirements:

- US Person (Citizen or Permanent Resident)

Education/Experience:

- BS degree (MS Preferred) in Computer Science, Robotics, Computer Engineering, Electrical Engineering, or equivalent.

Required Qualifications:

- 1-5 years of experience (or 0-5 years w/ MS) post-grad experience in software development for either PC or embedded targets
- Extensive knowledge of C/C++ development (3+ years)
- Python experience for data processing and algorithm prototyping
- Strong understanding of development targeting Linux platforms
- Experience writing responsive multi-threaded and multi-process applications
- Basic knowledge of digital communications systems (Ethernet, USB, async. serial, CAN, SPI, I2C)
- Familiarity with commercial data acquisition systems and measurement technology
- Extensive knowledge of software version control systems (Git)
- Ability to formulate software architectures, implementation plans, and test plans
- Ability to work on multi-disciplinary teams and independently solve problems

Preferred Skills:

- Experience with space flight avionics or ground system software, particularly on planetary exploration missions
- Experience developing Linux kernel and user-space drivers
- Experience with distributed networked software for controls (i.e. ROS)
- GUI development experience (Qt experience preferred)
- Experience managing automated software build systems (e.g., CMake, GCC)
- 2+ years RTOS development experience
- Knowledge of robotics motion systems (e.g., manipulator kinematics and dynamics)
- Familiarity with motor and motion control systems
- Embedded software (MCU or MPU) development and debugging experience
- Working knowledge of various sensors (e.g., thermocouples, RTDs, strain gages, accelerometers)
- Knowledge of automated software test and continuous integration systems

TO APPLY: Follow instructions at <https://www.honeybeerobotics.com/about-us/careers/>