



Control Systems Software Engineer **Job Description**

The Company

Aperio is the leading provider of digital pathology solutions in hospital and reference labs, academic medical centers, and biopharma institutions across the world. Today, our affordable and complete product portfolio is proven to lower costs, increase efficiencies, and enhance workflow in labs everywhere. Our comprehensive product line features our ScanScope® scanners, Spectrum™ image management (PACS) software, SecondSlide™ slide sharing service for pathology, and image analysis tools and services.

Aperio's products are FDA cleared for specific clinical applications, and are intended for research and education use for other applications. For clearance updates and more information please visit www.aperio.com.

Responsibilities:

A member of the ScanScope systems development team. Design and develop software to automatically capture images from microscope slides. ScanScopes have a 3 axis stage with nanometer positioning accuracy. Each has a high-speed color line scan camera and one or more area cameras. ScanScopes support bright-field and fluorescent imaging. ScanScopes can automatically scan five to several hundred slides. Images are compressed using JPEG or JP-2000. Images can be huge. File formats include BigTIFF. ScanScopes can be remotely controlled and the images are sent to central server where they can be processed, viewed, and annotated.

Support systems development efforts including systems designs, algorithm development, and diagnostic tools development.

Tasks include:

- Requirements analysis, design, and implementation of servo based motion control for a high precision, multi-axis system.
- Specification, evaluation, and selection of motion control components.
- Troubleshooting and optimization of servo based systems.
- Develop hardware and software specifications for motion control.
- Systems modeling and stability analysis.
- Development of diagnostic and support procedures to support manufacturing and customer service.
- Develop software in accordance with Aperio software development procedures.
- Provide second-level customer support.

Required Experience / Skills:

- Software development for a servo based motion control system using advanced motion control algorithms.
- Outstanding analytical and critical thinking skills
- Minimum four years C++
- Windows based software development environment including Visual Studio
- Hardware and software interfacing
- Design of concurrent, parallel, and distributed systems
- Has been a core member of a cross-functional systems development team
- Good written and verbal communication skills

Desired Experience / Skills:

- A specialization in mechatronics or robotics.
- User interface design
- LabView, Matlab, oscilloscope, logic analyzer
- ACS, Elmo or other off-the-shelf motion controllers
- Servo tuning, Optimization, Stability analysis
- Filter design, System Id
- Software development for medical devices
- High precision, multiaxis machine design and implementation
- Product development from concept through product launch and support.

**Location and type:**

Full-time employment in Vista, California

Compensation and benefits:

Aperio pays our great people salaries commensurate with market value, and provides full benefits including health benefits and a 401(k) plan. All Aperio employees participate in our stock option plan.

Contact

Aperio is committed to attracting and retaining the most highly qualified candidates available. As an Aperio employee you will be consistently challenged to deliver your best. Because we provide our customers the best technologies and service in the industry, you will constantly develop new skills, learn new products, and be involved in activities that are highly valued in the marketplace. At Aperio, we value our customers as partners, and therefore strive to deliver excellence in everything we do. If you are ready for this challenge, contact us by sending your resume to

jobs@aperio.com. Please include the position title.