

Laser Software Engineer

Radiantis is a globally recognized leader in the design and manufacturing of advanced solid-state lasers and optical parametric oscillators. Our innovative technologies play a pivotal role in fields such as non-linear microscopy, spectroscopy, and a wide range of cutting-edge research applications.

Since our founding in 2006, we have earned the trust of prestigious universities, research centers, and institutions worldwide by delivering high-performance, reliable solutions that meet the exact demands of advanced scientific research, enabling groundbreaking discoveries.

We pride ourselves on fostering a culture of innovation, excellence, and collaboration. We are currently seeking a Laser Software Engineer to join our talented team.

Key Responsibilities

As a Laser Software Engineer in this role, you will contribute to the development of advanced laser systems by designing, implementing, and maintaining software solutions that control and monitor our optical instruments. Your work will directly support the performance, usability, and reliability of our products.

Your responsibilities will include:

- Design and implement advanced software solutions for the automation and control of tunable lasers and optical instruments.
- Develop and optimize control algorithms in Python to manage and fine-tune the performance of laser systems, ensuring stability, precision, and responsiveness.
- Collaborate cross-functionally with optical and mechanical engineers to translate complex technical requirements into robust, scalable software solutions.
- Create intuitive graphical user interfaces (GUIs) that enable seamless and user-friendly interaction with laser systems and diagnostics tools.
- Integrate communication protocols (e.g., serial, USB, Ethernet) to interface with embedded systems and external devices for real-time monitoring and control.
- Conduct thorough testing and validation to ensure software performance meets or exceeds functional requirements and user expectations.
- Diagnose, debug, and refine software systems throughout the development and prototyping phases to enhance stability, responsiveness, and overall system reliability.

Knowledge/Skills/Requirements

We are looking for a self-motivated professional who thrives in a dynamic and collaborative team environment. You will be responsible for the success of your assigned projects. Key qualifications include:

- A Master's degree in IT Engineering with relevant experience, or a PhD in Telecommunication Engineering, Industrial Engineering, or Physics.
- Experience in controlling actuators, such as servos, piezoelectric devices, and stepper motors.
- Knowledge of temperature control systems for optical components, including subsystem design and integration.
- Proficiency in reading and interpreting analog sensor data, including temperature, humidity, photodiodes, and spectral sensors.
- Strong programming skills in Python, particularly for developing graphical user interfaces (GUIs).
- Experience in communicating with embedded systems, sensors, and actuators using I2C and serial protocols.
- Understanding of USB protocol programming is a plus.
- Familiarity with LabVIEW is advantageous but not required.
- Strong oral and written communication skills in English; knowledge of Spanish is a plus.

If you're passionate about developing software for high-tech laser systems and thrive in an environment where innovation meets precision, we'd love to hear from you.

This position offers a unique opportunity to join a team of highly skilled professionals at the forefront of laser technology. As a Laser Software Engineer, you'll play a key role in developing the software that powers our advanced laser systems, enabling cutting-edge applications in science and industry.

If you're passionate about high-tech innovation and excited to design and implement software solutions that drive precision and performance in photonics, we'd love to hear from you.

To apply, please submit your CV and a cover letter directly through the LinkedIn job posting: <https://www.linkedin.com/jobs/view/4267451285/>
Be sure to highlight your motivation and relevant experience.