



We live in a rapidly changing world. To respond to these changes, companies need an increasingly precise knowledge and understanding of their immediate physical environment.

Stereolabs meets these needs with its smart 3D cameras and by developing the first connected intelligence platform capable of extracting information in real-time from a network of 3D sensors. By combining deep learning and 3D computer vision, Stereolabs allows its customers to achieve an understanding of their environment unmatched until now.

With more than 50,000 users worldwide, Stereolabs enables businesses and developers in nearly 130 countries to develop the next generation of robots and intelligent spaces.

### **3D Camera Architect (CDI) :**

The Hardware team is responsible for all research, design, development, test, and qualification of camera hardware for Stereolabs products. The team is looking for an extraordinary Camera Architect to take ownership in the development of high-quality camera modules.

- Lead end-to-end test and characterization of current and new optical components.
- Drive development of advanced metrology methods.
- Developing algorithm for lab type testing for camera evaluation.
- Designing and supporting of production line testing setups.
- Optimization of image sensor settings and ISPs.
- Develop calibration algorithms to enable best-in-class depth quality.

### **Key qualifications :**

- Strong understanding of camera hardware design (components, functions, etc.).
- Ability to perform comprehensive optical and image quality characterization of the lens and the camera module.
- Ability to develop advanced methods for camera evaluation.
- Ability to design, characterize and integrate new lenses into camera modules.
- Work closely with sensor and lens suppliers for prototype design, evaluation, and MTF testing.
- Ability to lead and manage vendor engineers to address complex, time-critical problems is a key requirement.
- Familiarity with camera ISP pipeline.
- Proven ability in algorithm development for imaging systems including calibration algorithms.
- Strong debugging and analytical skills.
- Ability to craft exploratory investigations to help tackle our toughest problems.
- Delivering executive level presentations of results.

### **Image Quality Engineer (CDI) :**

The Hardware team is responsible for all research, design, development, test, and qualification of camera hardware for Stereolabs products. The team is looking for an extraordinary Camera Image Quality Engineer with responsibilities for ongoing evaluation, benchmarking and characterization of Stereolabs camera products.

- Developing and performing lab type testing and software for camera evaluation
- Development of imager test techniques
- Optimization in imager sensor settings
- Optimization of ISPs (Image Signal Processor)
- Design and support of production line testing setups
- Performing testing and data analysis on benchmark products
- Will deliver executive level presentations of results

### **Key qualifications :**

- Deep understanding of image quality metrics and evaluation methodology
- Possess strong Matlab programming skills on digital image processing and data analysis
- You will also have familiarity with Python / C++ programming
- You will need strong knowledge of Image Sensor operation and tuning
- Have some knowledge of lens selection and qualification, and be familiar with imaging algorithms (auto-exposure, auto white balance, auto-focus,..etc.)
- Experience with objective camera bench testing and subjective image quality analysis
- Familiarity with camera components and functions
- Support design team through iterative testing and ongoing support from early prototype to product launch.

## **Image Processing Engineer (CDI) :**

Our products have a considerable complexity and rich feature set that push our hardware and software to the edge. We are looking for a great teammate who is dedicated to understanding, building, and promoting integration between different HW and SW components to enable ground breaking features and performance.

This role requires an understanding of different ISP and framework components and their impact on image and video quality, a clear vision of what constitutes a phenomenal camera, and a strong dedication to drive features into better camera user experience.

You will contribute directly to a variety of cutting edging technologies, such as Deep fusion, HDR, Portrait mode, and various algorithm development.

You will participate in quality evaluations for new features and algorithms through experimental studies, provide direct feedback to the engineering teams.

In this role you'll be a critical part of a fast-paced, collaborative team and who thrive in a high energy, time-constrained, multitasking environment.

### **Key qualifications :**

- Strong understanding of ISP and de-noising algorithms
- Understanding of multi brackets fusion schemes
- Excellent sense of photography, videography, cinematography
- Understand digital photography and image processing technologies
- Knowledgeable with lighting, whether artificial or natural and how it affects image and video quality
- Have some understanding of computational photography and machine learning
- Possess a deep understanding of photography: exposure settings, WB, depth-of-field, etc.

- Focus on details and have and possess strong debugging and analytical skills
- Experience testing and validating digital or cell phone cameras
- Excellent written and verbal communication skills

**2 internships :**

- Image Quality Engineer (Internship – 6 months)
- Image Processing Engineer (Internship – 6 months)

**Si vous êtes intéressé.e par l'une de ces positions, vous pouvez envoyer CV + lettre de motivation à l'adresse suivante : [laurene.guisolphe@stereolabs.com](mailto:laurene.guisolphe@stereolabs.com)**