

## Internship in Image processing: 2 months. for -summer 2020

### Adaptation of a new camera for Superresolution Microscopy

#### Company description

Incorporated in 2010 and based in Paris, BioAxial develops and markets breakthrough super-resolution (SR) imaging solutions for the study of live cells and fixed biological samples. Our technology is based on LiveCODIM, a unique beam shaper that combines the best from SIM SR technology with confocal microscopy's point scanning geometry.

BioAxial offers a challenging and agile work environment that promotes creativity. The candidate will be joining a multi-disciplinary R&D team with backgrounds in physics, optics, biology, mathematics, software and system engineering.

#### Internship description

A new camera has been identified which allow to acquire data faster. However, this camera, due to its design, has a high speed only when operated through Linux and not using Windows as implemented in BioAxial system. The aim of this internship is to validate the camera performances under Linux and Windows and to create a patch, in which the data will be acquired under Linux, potentially on a separate computer or card, and transferred to the BioAxial processing unit using a stable and robust protocol

#### Timetable

A tentative schedule of the internship is as follows:

- 1 week of learning the concepts and specificities of CODIM technology.
- 2 weeks dedicated to learning camera performances
- 2 weeks Implementation of a Linux/Windows protocol
- 3 weeks of tests
- 1 week of documentation

#### Profile

Education/Experience: The candidate will possess the following combination of knowledge, skills, and experience:

- Student in Engineering with a good knowledge of computer and computer protocols.
- Strong problem solving skills.
- Software skills and ability to program in a methodologically stable environment.

#### Contact:

If you'd like to join our team and also like to be involved in exciting and challenging work in the cutting edge technology, please send your resume to us.

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