GEVES
Expertise & Performance.

RESEARCH AND DEVELOPMENT INTERNSHIP
6 months

KEYWORDS :

Image Processing, Artificial Intelligence, Computer Vision, Machine Learning, Seed Testing

OVERVIEW :

You will carry out your internship within the National Seed Testing Station (SNES), one of GEVES sectors, which is the French National Reference Laboratory for Seeds and Plants. The station contributes to the enforcement of seed certification regulations and facilitates national and international seed trade. You will be assigned to the Physical Analysis laboratory whose main missions are: carrying out analyzes for the evaluation of the physical quality of seed lots, supervising the French network of recognized laboratories as well as developing and improving methods. Join GEVES for a 6-months paid internship that offers personal and professional development. Our interns will be able to apply their theoretical knowledge to interesting projects in a research environment alongside technical and academic mentors. The intern will be able to express their own ideas to address challenging real-world problems and will be encouraged to publish the results of their work!

RESPONSIBILITIES

The automation of seed quality analysis methods is an important issue within the Physical Analysis Laboratory and arouses ISTA (International Seed Testing Association) interest, in addition to all seed companies at the international level. The work will be a part of a Ph.D. project being carried out in the laboratory in collaboration with ImHorPhen research team (IRHS).
The candidate will conduct research and development work on novel methods for automating the evaluation of the seed's physical quality using advanced imaging techniques. also, the candidate will work as part of the imaging team on data acquisition, prototype development, data analysis, validation, and testing. The responsibilities will also include the following:

- Evaluating the performance of different Imaging and Machine Learning approaches
- Writing technical reports and prepare presentations
- Optimization of our existing models via standard techniques as well as machine learning applications

SKILLS

- Master's students in Computer Science, Computer Engineering, Electrical Engineering, or relevant fields

- Background in image processing, computer vision, and/or machine learning

- Strong analytical skills and excellent problem-solving skills

- Excellent communication and interpersonal skills

- General programming skills using Python or other equivalent development tools: C/C++/C#, or MATLAB

- English knowledge is appreciated

- Ability to work independently, self-motivated, and collaborate in a team environment

This internship will begin in the first quarter of 2022 (date subject to flexibility).

> ➢ **Apply by sending a copy of your C.V and a motivation letter to:**
> - Sherif HAMDY, Imaging Lab Head, GEVES-SNES, **SHERIF.HAMDY@GEVES.FR**
> - Aurélie CHARRIER, Director of Physical Analysis Laboratory, **AURELIE@CHARRIER@GEVES.FR**