Opportunity for a special project at ENSEA

Research Lab/Research group/Project supervisor: ☒ETIS ☐Quartz

> ETIS / Cell / Camille Simon Chane

Project title:

> Development of an acquisition prototype for the recognition of hematophagus dipters

Project's short description:

> The worldwide distribution of hematophagus dipters is evolving due to climate change and globalization. The Cell team of the ETIS lab is developing an entomological surveillance tool to be used in tropical and subtropical areas. Our method is based on the recognition of Wing Interference Patterns by a machine learning algorithm. Previous work has resulted in an Android application that can recognize the insect species given a WIP image.
>
> The current work will be to develop an acquisition prototype to acquire the WIP images directly using a cell phone. Pre-processing of the acquired images will also be implemented in the application. Validation and test of the prototype will be an important part of the job

Area:

> Image processing & Machine learning

Keywords:

> Instrumentation / Image processing / Machine learning

Prerequisite:

> Programming (python, object oriented), basic image processing an interest in machine learning as well as for the application domain.

Duration & Period of work: 5 or 6 Months & [   ] Weeks; From ASAP to [   ]

Applicant's minimal background: ☐Bachelor/Licence ☒Graduate/Master ☐PhD/Doctorate

Language proficiency required: ☒English ☐French ☐Other: [   ]

Additional information:

> Remuneration : around 500€/month

Documents required for application: ☒CV ☒Cover letter ☐Transcript of Records

☐Other documents: [   ]

Contact for application: camille.simon-chane@ensea.fr

Contact for information: camille.simon-chane@ensea.fr