AGIR Project Proposal

2023-2024

Title (titre):

Enhancing Wildlife Conservation through Computer Vision Monitoring

Partner/Client (partenaire/client):

Not yet decided but possible partners could be NGOs, laboratories, researchers. It is important to note that this decision will be taken once the precise use case has been developed, because it will depend on the geographical region and species selected.

Dimensions (dimensions):

TECHNIQUE / SOCIETALE / SCIENTIFIQUE / METHODOLOGIQUE / ARTISTIQUE / AUTRE

Summary including Objectives and Deliverables (résumé y compris les objectifs et les livrables):

The project aims to leverage Computer Vision technology to monitor endangered animals, respective migrations/ movements, and their habitats, enhancing wildlife conservation efforts. The geographical region and species still must be fixed once the group finished doing research on which species have corresponding data sets that are rich enough to build models. The main objectives could be (depending on the specific use case):

- Develop a computer vision system capable of identifying and/or tracking endangered animals.
- Implement monitoring tools to assess animal movements influenced by climate change.

Please note that we consider the researching phase as the first major step of the AGIR project. We don't want to start developing a solution without having identified a real need/ use case where this would add value to sustainable animal/ wildlife monitoring and create a positive impact. Therefore, we thought about the following structure for this project:

1. Brainstorming and doing research on simple use cases where we could create value.
2. Learning about Computer Vision and the technologies, methods and models used for it.
3. Applying the new knowledge to the above use case.
4. Concluding / Thinking about how this could be engineered / developed on a bigger scale.

If our results make it possible, we would like to further collaborate with environmental agencies to integrate the system into their conservation strategies. We want to think about this once a first prototype has been built.

References (références):

The context hasn't been chosen yet, references will be fournished once this is fixed.

Project Team (groupe-projet):

BECKMANN Mark (IF, team coordinator), GUILLOT Evann (IF), HADDAD Zyad (IF), MARTIN Noham (IF), ROULIER Marie (IF), MOREL Tim (IF), THAIZE Nicolas (IF), WARIN Hugo (IF)